C7350/C7550

User's Guide

Windows®

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59366001

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Document Information

C7350n/7550n User's Guide for Windows

P/N 59366001

Revision 2.0

March, 2007

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This product complies with the requirements of the Council Directives 89/336/EEC (EMC) and 73/23/EEC (LVD) as amended where applicable, on the approximation of the laws of the member states relating to Electromagnetic Compatibility, Low Voltage and Radio & Telecommunications Terminal Equipment.

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Notes, Cautions, etc.

NOTE

A note appears like this. A note provides additional information to supplement the main text which helps you to use and understand the product.

CAUTION!

A caution appears like this. A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING!

A warning appears like this. A warning provides additional information which, if ignored, may result in a risk of personal injury.

Important!

An important message appears like this. An important message provides supplemental information which can prevent potential problems.

Introduction

Congratulations on purchasing this color printer!

This chapter summarizes the main features of your printer.

It also explains how to use this User's Guide to get the most from your printer.

Printer Models and Features

Summary Table

Model	Resolution	Print speed	Network card	Duplex unit	Memory	Hard disk
C7350n	600 x 1200 dpi	24 ppm color[a]	Standard	Option	192 MB	Option
C7350hdn	600 x 1200 dpi	24 ppm color[a]	Standard	Standard	320 MB	20 GB standard
C7550n	1200 x 1200 dpi	24 ppm color[a]	Standard	Option	192 MB	Option
C7550hdn	1200 x 1200 dpi	24 ppm color[a]	Standard	Standard	320 MB	20 GB standard

a. 26 ppm monochrome

Printer Models and Features

Descriptions

- Single pass digital technology for high quality, speed and reliability.
- Versatile paper handling:
  - *Standard 530-sheet paper tray*
  - *Standard 100-sheet multi purpose tray for card stock, envelopes, labels, etc.*
  - *Optional 530-sheet paper trays providing up to a maximum of 1690-sheet capacity*
- High capacity 20Gb hard disk drive (standard on hdn models, optional on others).
- Flexible interfaces with automatic switching:
  - *USB*
  - *High-speed, bi-directional parallel (IEEE-1284)*
  - *Industry standard network connectivity via internal network interface card*
- Environmentally friendly: the advanced power save mode minimizes power consumption and the separate toner and drum design cuts down on waste.
- Automatic color balance adjustment: To ensure consistent output at all times, the printer automatically performs a color check when the machine is switched on or when the top cover is opened and closed. After the check, the printer automatically adjusts the color balance. It can even be set to adjust the color balance during long print runs.
- Auto media detect: detects the weight of the media being fed through the printer then automatically adjusts the fusing temperature, speed (if necessary) and transfer voltage to ensure correct fusing and print quality.
- Duplex printing for fast two-sided output (standard on hdn models, optional on others).

How to use this manual

This manual covers the unpacking, setup and operation of your printer. It helps you use your printer's many features.

This manual also includes:

- troubleshooting information
- maintenance guidelines
- instructions for adding options

NOTES

This User's Guide was written using one printer as a model. The illustrations/screenshots reflect this.

The information in this manual is supplemented by the extensive online help facility in the printer driver software.

Online

Use Adobe Acrobat Reader to read this manual on screen.

Use the navigation and viewing tools provided in Acrobat.

You can access specific information in two ways:

- In the list of bookmarks down the left hand side of your screen, click the topic of interest to jump to the required topic. (If the bookmarks are not available, use the Table of Contents.)
- In the list of bookmarks click Index to jump to the Index. (If the bookmarks are not available, use the Table of Contents.) Find the term of interest in the alphabetically arranged index. Click the associated page number to jump to the page containing the subject.

Printing Pages

The whole book, individual pages, or sections may be printed.

NOTE

The line art graphics in this manual are PostScript.

If you plan to print parts of this manual, choose a PostScript driver. Otherwise, the graphics print at low resolution. The print quality may not be satisfactory.

The procedure for printing from Acrobat Reader is:

1. From the toolbar, select **File**, then **Print** (or press the Ctrl + P keys).
2. Choose the pages you wish to print:
   a. **All pages** for the entire manual.
   b. **Current page** for the page at which you are looking.
   c. **Pages from** and **to** for a range of pages. You select the range by entering the appropriate page numbers.
3. Click **OK**.

Unpacking

WARNING

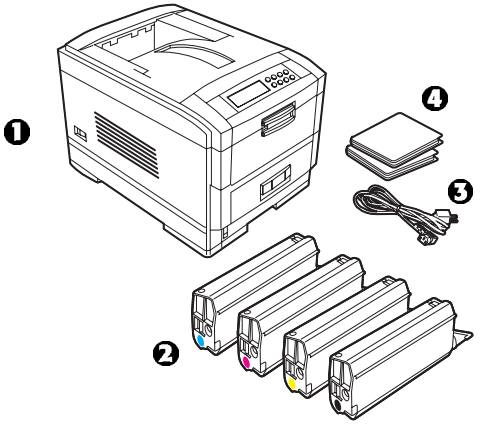
This printer weighs 106 lbs. (48 kg).
Two people are required to lift the printer safely.

Unpack the printer.

Save all of the packing materials. Use them if you have to move (ship) the printer.

Choose a suitable place to put the printer.

Check that you have all of these parts BEFORE you continue.



1. The printer
2. Toner cartridges (4) [cyan, magenta, yellow and black]
3. Power cable
4. Documentation: Setup Guide, Software Installation Guide, Warranty booklet.
5. LED lens cleaner (not illustrated)
6. Light-proof plastic bags (not illustrated)
7. CD(s) [not illustrated]

Printer Drivers, Software Utilities, and Documentation

The CDs supplied with your printer contain:

- Drivers
- Color Utilities
- Network Utilities
- Manuals

Where to put the printer

Weight Requirements

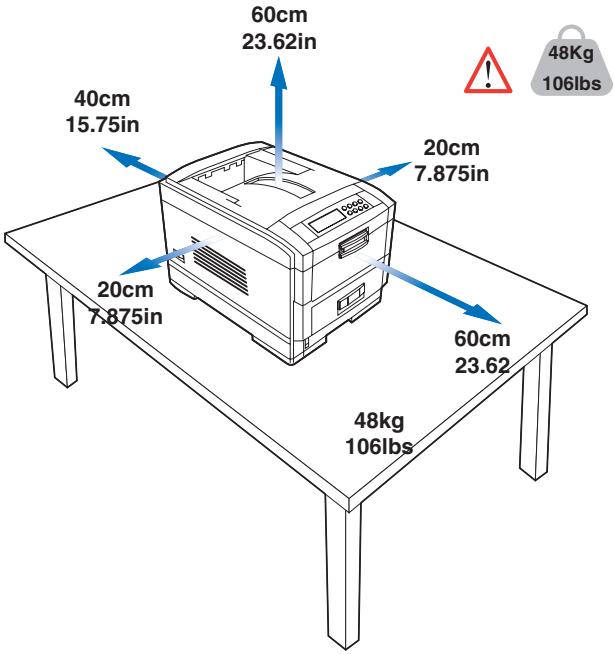
Place the printer on a flat surface large enough and strong enough to accept the size and weight of the printer.

WARNING

This printer weighs 106 lbs. (48 kg).
Two people are required to lift the printer safely.

Space Requirements

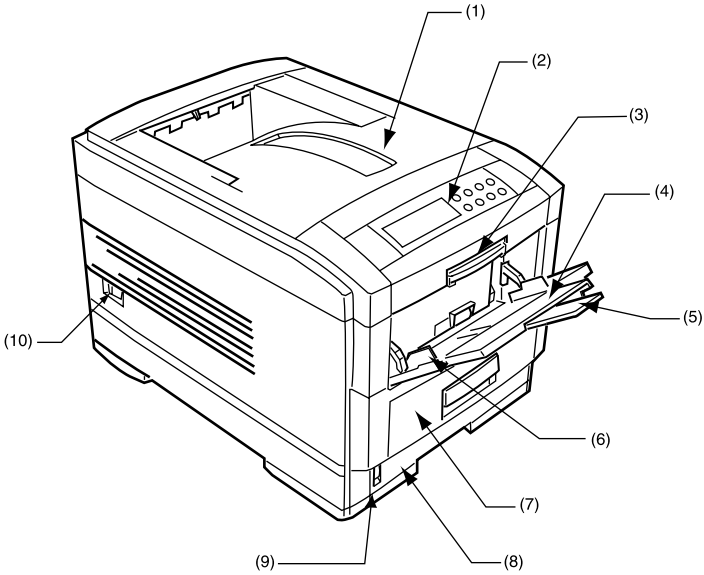
There must be enough space around the printer to allow for access and printer maintenance.



Parts of the Printer

External

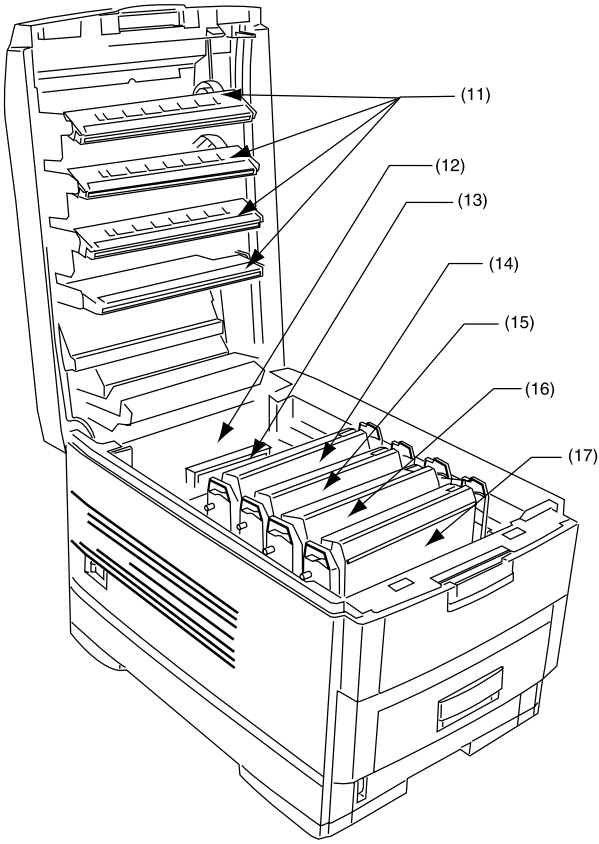
1. Top cover
2. Control panel
3. Top cover release catch
4. Multi purpose tray (manual feed)
5. Paper support extension
6. Paper guides
7. Front cover
8. Paper tray
9. Paper level indicator
10. Power switch



Parts of the Printer

Internal

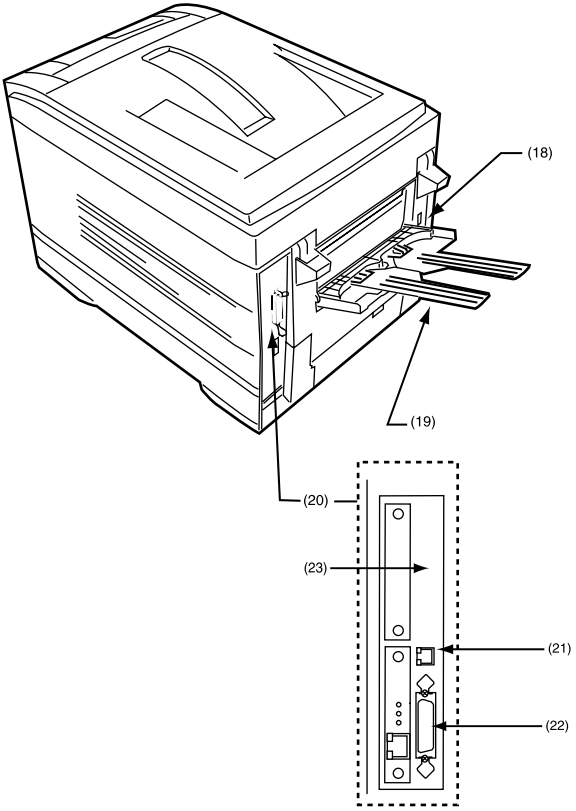
11. LED heads (4)
12. Discharge roller
13. Fuser unit
14. Image drum and toner cartridge (cyan)
15. Image drum and toner cartridge (magenta)
16. Image drum and toner cartridge (yellow)
17. Image drum and toner cartridge (black)



Parts of the Printer

Back

18. Power connector
19. Rear exit paper tray
20. Interfaces and option card slot
21. USB interface connector
22. Parallel interface connector
23. Network interface card



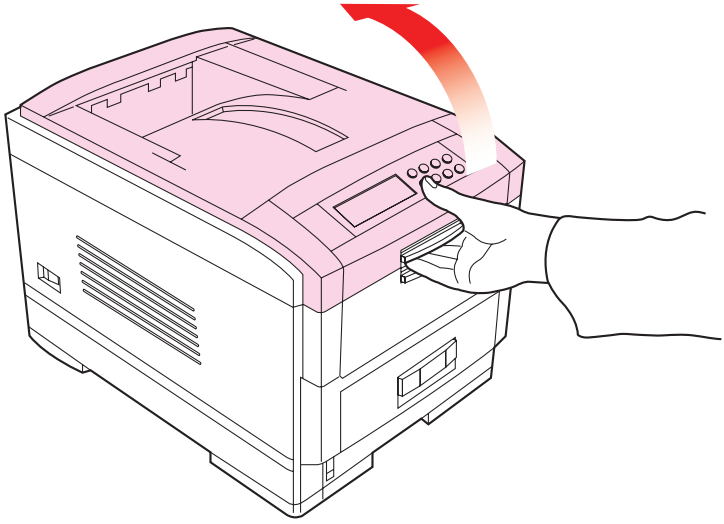
Setting Up

Before connecting this printer to the computer and power supply

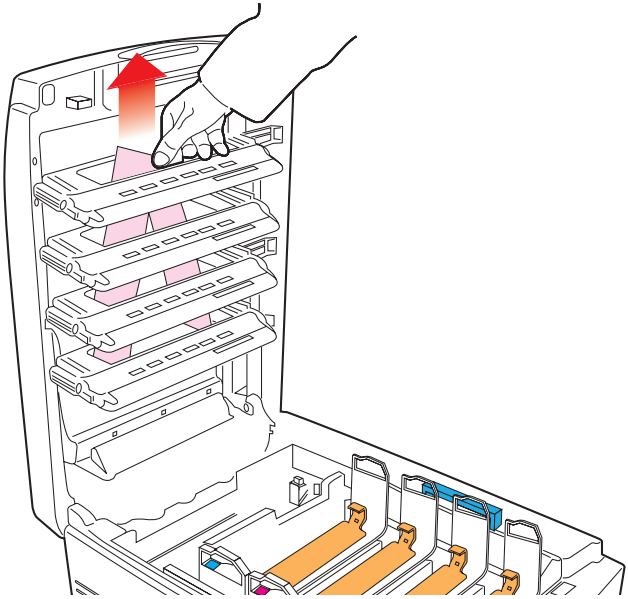
- the shipping packaging must be removed
- the toner cartridges must be installed
- and paper must be loaded.

Shipping Materials: Removing

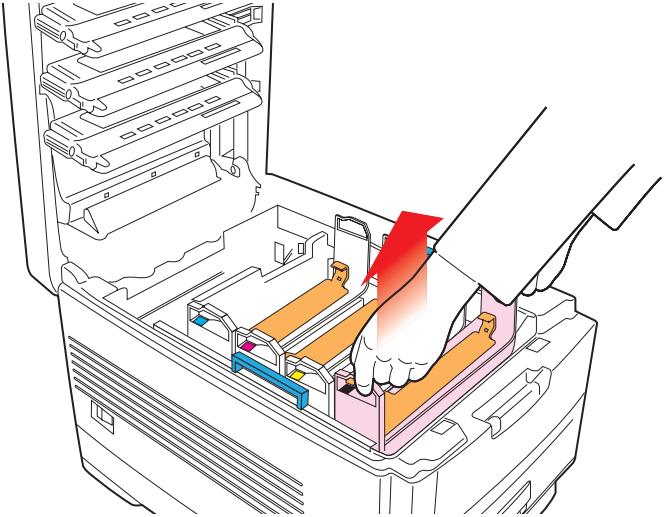
1. Remove any adhesive tape and packaging from the printer.
2. Use the release handle to open the top cover.



3. Remove the LED head restrainer from behind the LED heads in the top cover.



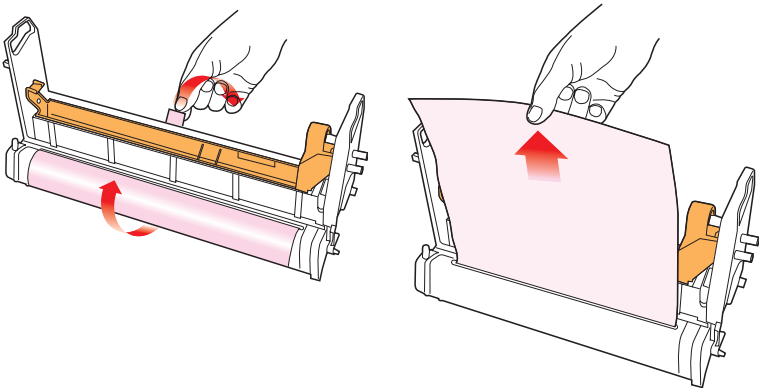
4. Remove the black image drum and place it on a level surface.



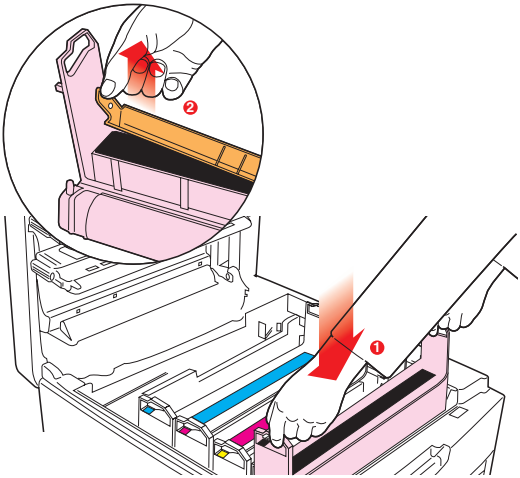
CAUTION!

- **Never expose image drums to light for more than 5 minutes.**
- **Always hold image drum by the ends.**
- **Never expose image drums to direct sunlight.**
- **Never touch the green surface of the drum.**

5. Remove the protective sheet.



6. Put the black image drum back into the printer (1). Push the tab (2) inwards and remove the blanking plate from the drum.
7. Repeat steps 4 through 6 for each color drum.



Toner

Installation

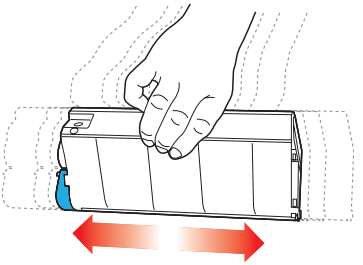
WARNING!

Take extreme care when handling toner.

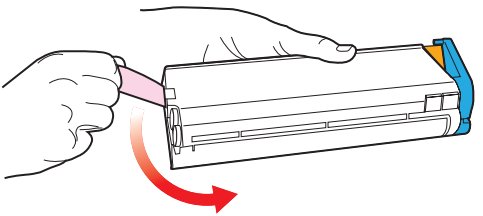
- ***Toner can be harmful if inhaled, swallowed or if it gets in the eyes.***
- ***Toner can also stain hands and clothing.***
- ***See the Material Safety Data Sheets in your* Warranty, Regulatory and Safety Information *booklet for more information.***

1. Remove the black toner cartridge from the package.

2. Shake the toner cartridge back and forth several times.

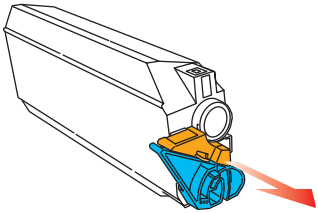


3. Hold the toner as shown. Remove the tape.



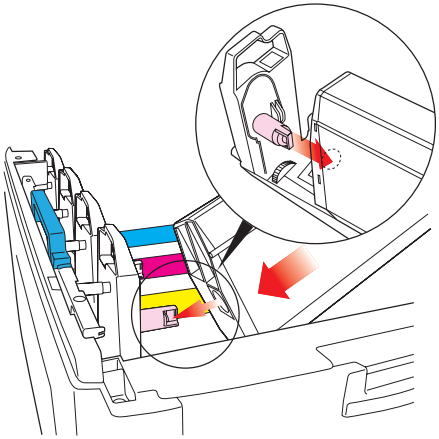
4.

Remove the plastic clip from behind the colored lever.

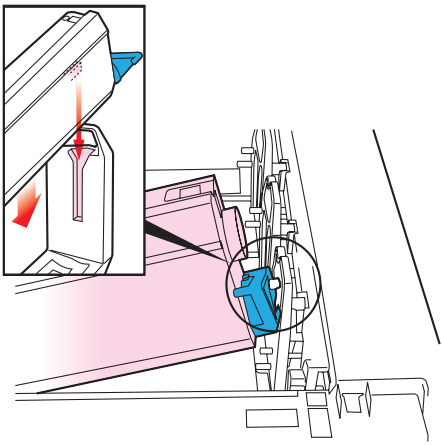


5. Insert the toner cartridge into the black image drum, left side first, engaging the drum locating peg in the hole in the toner cartridge.

Make sure the colors of the toner cartridge and image drum correspond!



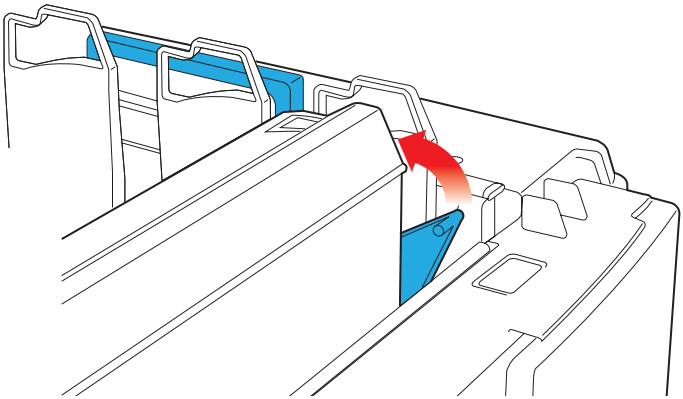
6. *Gently* push the toner cartridge down engaging the locking pin into the groove on the image drum.



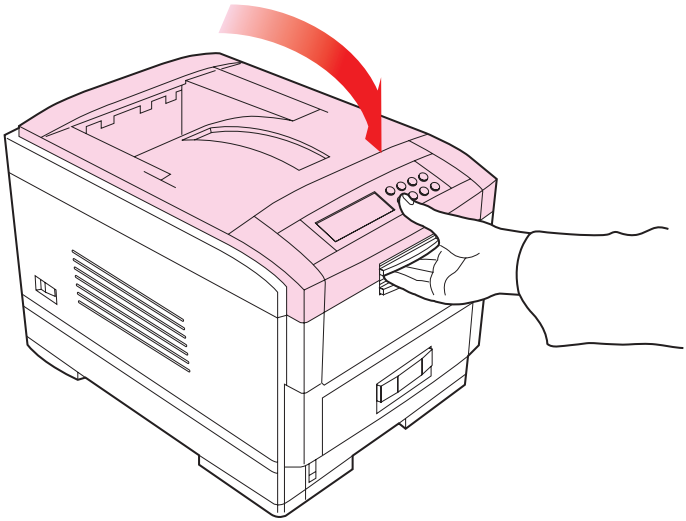
7. *Gently* push the colored lever toward the rear of the machine until it stops. This releases the toner into the image drum.

CAUTION!

The lever should go back easily. If the lever resists moving, *STOP*. Press down on the cartridge to be sure that it is firmly in place before proceeding.



8. Repeat the process for each color toner cartridge.
   Make sure to match the color toner to the color image drum.
9. Close the top cover.



Toner

TONER LOW or CHANGE TONER

NOTE

After installing the new toner cartridges, the message TONER LOW or CHANGE TONER may appear on the display. If this message does not disappear after a few pages have printed, reinstall the appropriate toner cartridge.

Toner

TONER SAVE Mode

Use Toner Save to maximize the life of your toner cartridges.

Toner Save is turned on or off through the Print Menu.

Turn the feature on or off

1. Press ONLINE. **OFFLINE** displays.
2. Press MENU repeatedly until **PRINT MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) repeatedly until **TONER SAVE** displays.
5. Press VALUE (either + or -) until the desired status displays.
   ON: Toner Save is activated (turned on).
   OFF: Toner Save is deactivated (turned off).
6. Press SELECT.
   An asterisk (*) appears next to the selected status.
7. When you are finished, press ONLINE. **ONLINE** displays.

Toner

Printing Black

Your printer prints the color black in one of two ways:

- Composite Black
- True Black

Composite Black

The cyan, magenta, yellow, and black toners are *combined* to create composite black.

Use composite black when printing photographs.

True Black

Only black toner is used to print true black.

Use true black when printing a combination of text and graphics.

Printer (Menu) Setting: True Black

True Black is turned on or off through the PCL Emulation Menu.

This setting *only* applies in PCL mode.

Turn the feature on or off

1. Press ONLINE. **OFFLINE** displays.
2. Press MENU repeatedly until **PCL EMUL MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) repeatedly until **TRUE BLACK** displays.
5. Press VALUE (either + or -) until the desired status displays.
   ON: True Black is activated (turned on).
   OFF: True Black is deactivated (turned off).
6. Press SELECT.
   An asterisk (*) appears next to the selected status.
7. When you are finished, press ONLINE. **ONLINE** displays.

Loading Paper

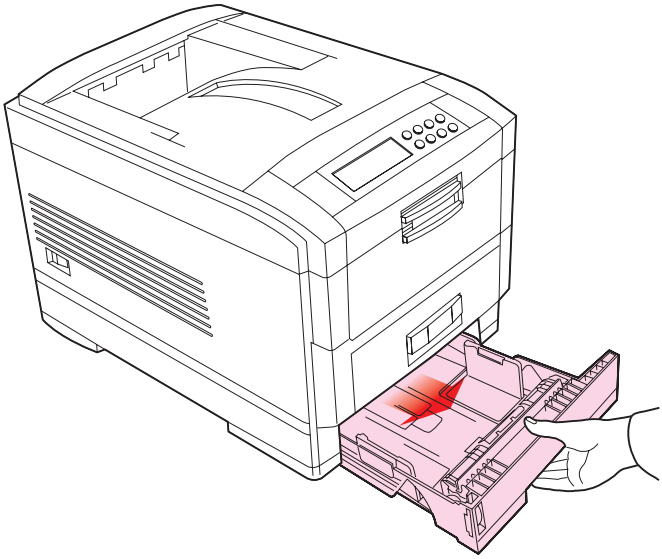
Tray 1

CAUTION!

To prevent paper jams

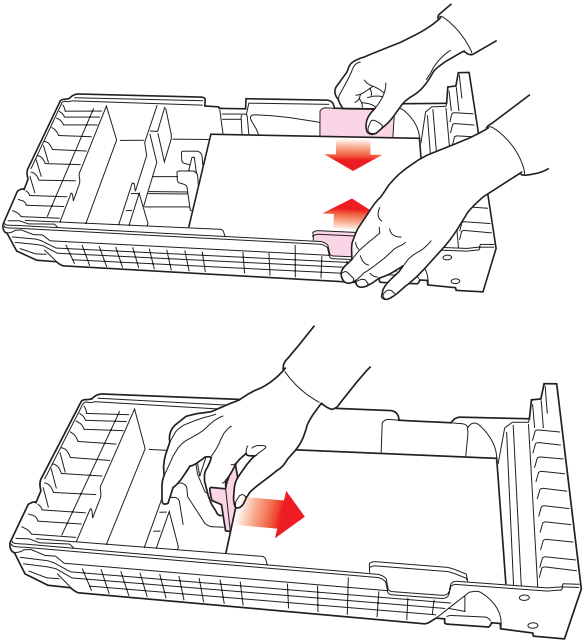
- **Don't leave space between the paper and the paper guides and rear stopper.**
- **Don't overfill the paper tray. Capacity depends on the type of paper and the paper weight. (max. 550 sheets of 20-lb. US Bond—75 g/m²—paper).**
- **Don't load damaged paper.**
- **Don't load paper of different sizes, paper quality or thickness at the same time.**
- **Don't remove the paper tray during printing.**
- **Close the paper tray *gently*.**

1. Pull out the paper tray.

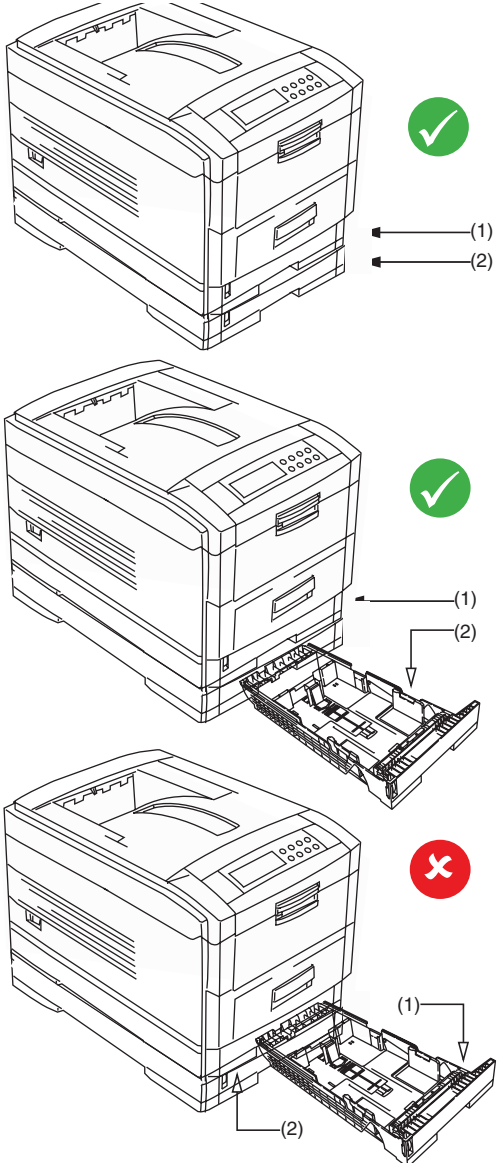


2. Load paper.

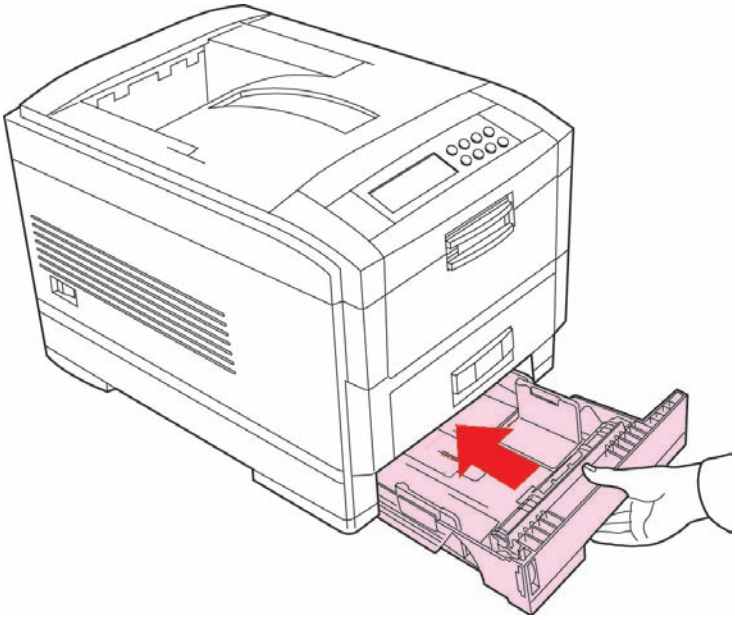
3. Adjust the paper guides and rear stopper for the size of paper being used.



4. A lower paper tray cannot be used for printing if any tray above it is not inserted.



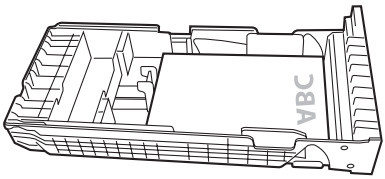
5. *Gently* close the paper tray.



Loading Paper

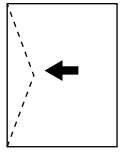
Letterhead

1. Load letterhead paper face down (for both portrait and landscape).



Envelopes

1. Load envelopes face up (flap down) as shown for both portrait and landscape printing.



Loading Paper

Paper Out

Use paper from next available tray

(Automatic Tray Switching)

NOTE

When a paper tray runs out of paper, the printer automatically switches to the next available paper tray when

- **more than one paper tray is installed**

  and

- **AUTO TRAY SWITCH is set to ON.**

  This setting is in the Print Menu.

  Refer to "Changing the Printer Settings" on page 71.

If one paper tray runs out of paper during a print job, the printer can use paper from the next available paper source (tray).

This feature is called Automatic Tray Switching.

You can also specify the order in which the paper trays are used during Automatic Tray Switching.

The factory defaults for these settings are:

Automatic Tray Switching is ON.
Tray Sequence is DOWN.

Loading Paper

Paper Out

Use paper from next available tray

(Automatic Tray Switching)

Turn on or off

1. Press MENU until **PRINT MENU** displays.
2. Press SELECT.
3. Press ITEM (either + or 1) until **AUTO TRAY SWITCH** displays.
4. Press VALUE (either + or 1) until the desired setting displays.
5. Press SELECT.
6. Press ONLINE. The printer goes online. **ONLINE** displays.

Loading Paper

Paper Out

Use paper from next available tray

(Automatic Tray Switching)

Set the sequence of use

1. Make sure Automatic Tray Switching is ON.
   See “Turn the feature on or off” on page 45.
2. Press MENU until **PRINT MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or 1) until **TRAY SEQUENCE** displays.
5. Press VALUE (either + or 1) to select the desired setting.
   Choices are down, up, and paper feed tray.
   The factory default for this setting is: DOWN
6. Press SELECT.
7. Press ONLINE. The printer goes online. **ONLINE** displays.

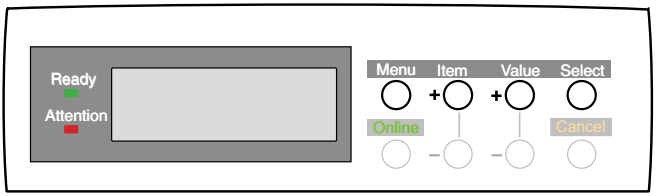
Loading Paper

Choosing the Paper Tray (Paper Feed)

NOTE

1 If the settings in the printer differ from those selected on your computer, the printer does not print. An error message displays.

2 The following printer settings are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the application (page setup).



1. Press ONLINE. **OFFLINE** displays.
2. Press MENU repeatedly until **PRINT MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) until **PAPER FEED** displays.
5. Press VALUE (either + or -) until the required paper feed displays
6. Press SELECT.
   An asterisk (*) appears next to the selected paper feed.
7. When you are finished, press ONLINE. **ONLINE** displays.

Printing Paths

Face Up / Straight Through

CAUTION!

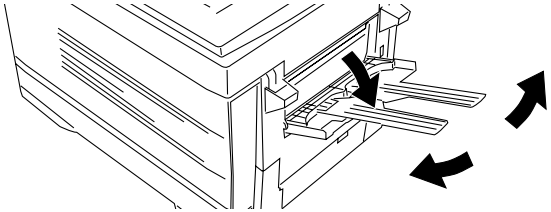
Don't open or close the rear paper exit while printing, as it may result in a paper jam.

Always use the face up (rear) stacker [straight through exit path] for thick paper (card stock etc.).

For face *up* printing (straight-through path), make sure the straight through paper exit is *open* and the paper support is extended.

The paper exits from the *side* of the printer.

- *Paper is stacked in reverse order.*
- *Tray capacity is about 100 sheets, depending on paper weight.*



Printing Paths

Face Down

CAUTION!

Don't open or close the rear paper exit while printing, as it may result in a paper jam.

Always use the face up (rear) stacker [straight through exit path] for thick paper (card stock etc.).

For face *down* printing, make sure the rear paper exit is *closed.*

The paper exits from the *top* of the printer.

- *Paper is stacked in printed order*
- *Paper tray capacity is about 500 sheets, depending on paper weight.*

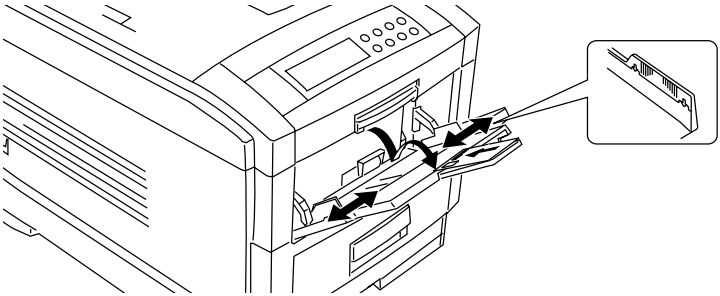
Printing Paths

Manual Feed

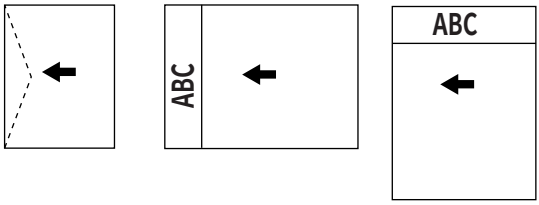
CAUTION!

Don’t open or close the rear paper exit while printing, as it may result in a paper jam.

1. Open the Multi-purpose (MP) tray. Extend the paper feed guides.



2. Load the paper.
- Load the media face *up.*
- *Adjust the paper guides to the size of the media being used.*
- *Don’t exceed the Paper Full line (about 100 sheets depending on paper weight).*
- *Load envelopes or letterhead stationery as shown.*



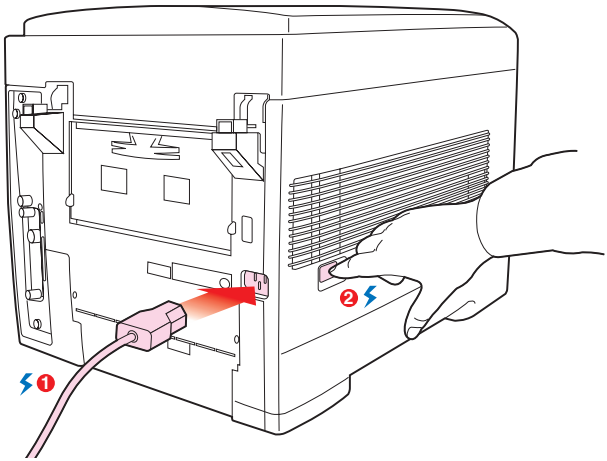
Power

Connecting the power cable

WARNING!

Make sure the printer is turned OFF before connecting the power cable.

1. Connect the power cable (1) to the printer.
2. Connect the cable to a grounded power supply outlet.



3. Use the on/off switch (2) and turn ON the printer.
4. The printer goes through its initialization and warm up sequence.
   When the printer is ready to print, the READY indicator comes on and stays on (green).
   ONLINE appears on the display.

Power

POWER SAVE Mode

Use Power Save to avoid turning off the printer.

> If you MUST turn off the printer, you must perform a shutdown sequence. See “Hard Disk Drive installed” on page 48.

Power Save is turned on or off through the Maintenance Menu.

You can choose the length of time the printer “waits” before entering Power Save. This is done through the setting “Power Save Delay Time” in the System Configuration menu.

Turn the feature on or off

1. Press ONLINE. **OFFLINE** displays.
2. Press MENU repeatedly until **MAINTENANCE MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) until **POWER SAVE** displays.
5. Press VALUE (either + or -) until the desired status displays.
   ENABLE: Power Save is activated (turned on).
   DISABLE: Power Save is deactivated (turned off).
6. Press SELECT.
   An asterisk (*) appears next to the selected status.
7. When you are finished, press ONLINE. **ONLINE** displays.

Power

POWER SAVE Mode

Set the "Wait" interval

1. Make sure Power Save is activated. See the previous procedure.
2. Press MENU until **SYSTEM CONFIG MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) until **POWER SAVE DELAY TIME** displays.
5. Press VALUE (either + or -) until the desired time displays.
6. Press SELECT.
   An asterisk (*) appears next to the selected time.
7. When you are finished, press ONLINE. **ONLINE** displays.

Power

Turn Off the Printer

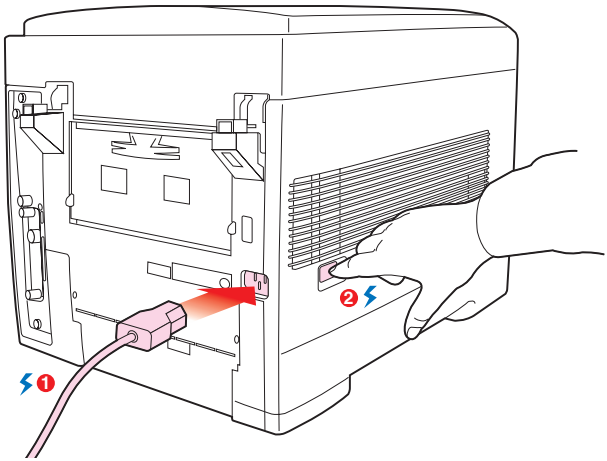
Hard Disk Drive not installed

Shutdown Sequence

CAUTION!

- **NEVER turn the printer off while it is printing.**
- **After turning the printer off, wait at least 10 seconds before turning it on again.**
  This allows the internal power levels to drop.
  Turning on too soon could cause the printer to malfunction.

1. Use the on/off switch (2) and turn OFF the printer.



Power

Turn Off the Printer

Hard Disk Drive installed

Shutdown Sequence

CAUTION!

- **NEVER turn the printer off while it is printing.**
- **If the optional hard disk has been installed, the following procedure MUST BE FOLLOWED before turning off the printer. This protects any data that is stored on the hard disk.**
- **Follow this procedure every time the printer is turned off for any reason.**
- **After turning the printer off, wait at least 10 seconds before turning it on again. This allows the internal power levels to drop. Turning on too soon could cause the printer to malfunction.**

Use Power Save to avoid turning off the printer.

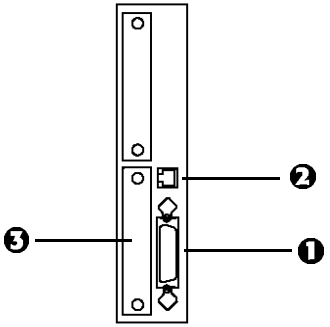
Refer to “POWER SAVE Mode” on page 45.

If you MUST turn off the printer:

1. Press MENU until **SHUTDOWN MENU** displays
2. Press SELECT.
3. Press SELECT again to begin the shutdown sequence.
4. When **PLEASE POWER OFF SHUTDOWN COMPLETED** displays, use the on/off switch to turn off the printer.
   Wait at least 10 seconds before turning it on again. This allows the internal power levels to drop. Turning on too soon could cause the printer to malfunction.

Interfaces

Location Diagram



Your printer has three interfaces.

1. Parallel
2. USB
3. Network

Interfaces

Parallel

For direct connection to a PC.

This port requires a bi-directional (IEEE 1384 compliant) parallel cable.

USB

For connection to a PC running Windows 98 or above (not Windows 95 upgraded to Windows 98) or Macintosh.

This port requires a cable conforming to USB version 1.1 or above.

- The printer may not operate properly if a USB compatible device is connected at the same time as other USB-compatible machines.
- When connecting multiple printers of the same type, they appear as *****, ***** (2), ***** (3), etc. These numbers depend on the order of connecting or turning on each printer.

Network

For network cable connection.

NOTE

Administrator's authority is required when installing a network connection.

See your printed *Software Installation Guide* for information on:

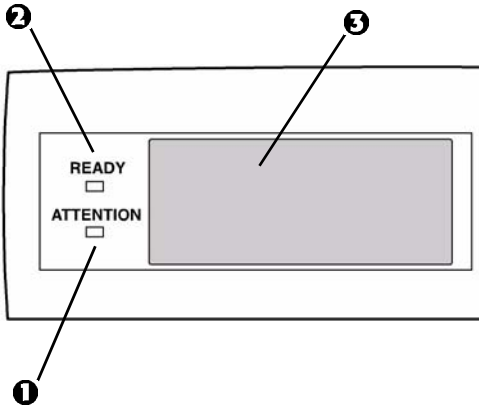
- Making the interface connections
- Installing the printer drivers
- Installing network software.

You can also go to **http://my.okidata.com** to see/download a copy of the *Software Installation Guide* or for the latest information on your printer.

Control (Front) Panel

Lights and Display

Diagram and Explanations



Attention

This light is red. (1)
ON - attention is required. *Printing continue*s.
FLASHING - attention is required. *Printing stops*.

Ready

This light is green. (2)
ON - ready to receive data.
OFF - not ready to receive data.
FLASHING - processing data or error.

Display Panel

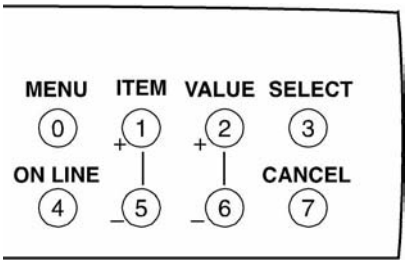
Displays (3)

- print status
- menu items in menu mode
- error messages

Control (Front) Panel

Buttons

Diagram and Explanations



Online

- Press to take the printer **ONLINE** or **OFFLINE**.
- In Menu mode, press to place the printer **ONLINE**.
- When **PAPER SIZE ERROR** displays, press to force the printer to print.

Cancel

Press to cancel a print job.

Menu

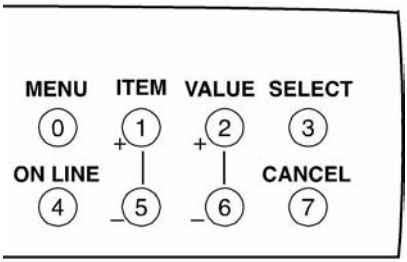
- Press briefly to enter the MENU mode.

  Press briefly again to select the next menu.
- Press for more than 2 seconds to scroll through the different menus.

Control (Front) Panel

Buttons

Diagram and Explanations



Item (+)

Press briefly to scroll forward to the next menu item.

Item (–)

Press briefly to scroll backward to the previous menu item.

Value (+)

Press briefly to scroll forward to the next value setting for each menu item.

Value (–)

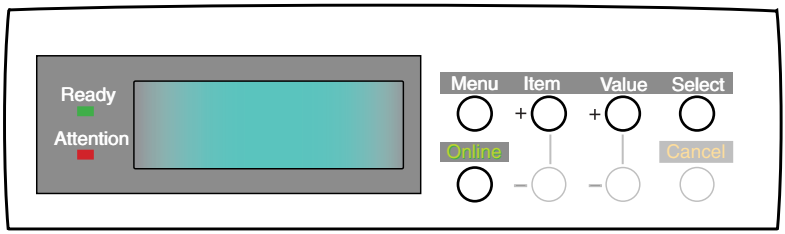
Press briefly to scroll backward to the previous value setting for each menu item.

Select

Press briefly to select the displayed menu, item or value.

Control (Front) Panel

Language of Display: Changing



1. Press ONLINE. **OFFLINE** displays.
2. Press MENU until **SYSTEM CONFIG MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or -) until **LANGUAGE** displays.
5. Press VALUE (either + or -) until the required language displays.
6. Press SELECT.
   An asterisk (*) appears next to the selected language.
7. When you are finished, press ONLINE. **ONLINE** displays.

Paper (Media)

Size

Selecting

NOTE

1 When using paper trays,
   - Custom paper sizes must be set.
   - Standard paper sizes are automatically recognized if CASSETTE SIZE is selected.

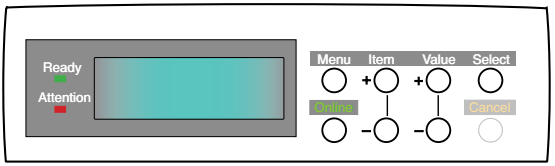
   CASSETTE SIZE is the default setting for EDIT SIZE in the Print Menu

   Refer to "Changing the Printer Settings" on page 71.
2 When using the Multi-Purpose (MP) tray (manual feed), the paper size has to be selected.
3 If the settings in the printer differ from those selected on your computer, the printer does not print. An error message displays.
4 The following printer settings are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the application (page setup).

Paper (Media)

Size

Selecting



1. Press ONLINE. **OFFLINE** displays.
2. Press MENU until **PRINT MENU** displays.
3. Press SELECT.
4. Press ITEM (either + or –) repeatedly until **EDIT SIZE** displays.
5. Press VALUE (either + or –) until the required paper size displays
6. Press SELECT.
   An asterisk (*) appears next to the selected paper size.
7. When you are finished, press ONLINE. **ONLINE** displays.
8. Before printing the file, select the correct paper settings in the printer driver.

Paper (Media)

Size

Paper Feed, Exit Path, and Duplex Options

The size, weight, and type of the paper (print media) determine:

- which paper feed tray can be used
- which paper exit path can be used
- whether you can use double sided (duplex) printing

Single sided printing is also known as simplex printing.

Please refer to the following table.

	Feed			Exit	
Paper (Media) Size	Tray 1	Tray 2/3	MP Tray Manual	Rear (Face up) Straight-Through	Top (Face down)
A4	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
A5	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
A6	S[a]	[b]	S[a]	S[a]	[b]
B5	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
Letter	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
Legal (13in / 330.2mm)	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
Legal (14in / 355.6mm)	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
Executive	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
Envelopes	[b]	[b]	S[a]	S[a]	[b]
Custom [c]	[b]	[b]	S[a]	S[a]	[b]

a. S = Simplex (print on one side of the paper
D = Duplex (printing on both sides of the paper).

b. Not Usable.

c. Width: 3 to 8.5 inches (76.2 to 215.9 mm)
Height: 5 to 14 inches (127 to 356.6 mm)
Must be defined in the printer driver before printing

Paper (Media)

Weight and Type

Selecting

CAUTION!

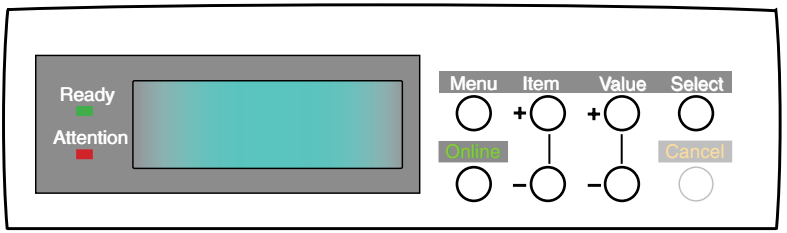
If type and weight are not correctly set,

- **print quality deteriorates**
- **the fuser roller may be damaged.**

NOTE

1 **If the settings in the printer differ from those selected on your computer, the printer does not print. An error message displays.**

2 **The following printer settings are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the application (page setup).**



Your printer automatically detects paper type and weight.

To override these settings:

1. Press ONLINE. **OFFLINE** displays.
2. Press MENU until **MEDIA MENU** displays
3. Press SELECT.
4. Press ITEM (either + or **–)** until **MEDIA TYPE** or **MEDIA WEIGHT** for the required tray displays.
5. Press VALUE **(**either **+** or **–)** until the required paper type or weight displays

6. Press the SELECT button.
   An asterisk (*) appears next to the selected paper type or weight.
7. When you are finished, press ONLINE. **ONLINE** displays.
8. Before printing the file, select the correct paper settings in the printer driver.

Paper (Media)

Weight and Type

Paper Feed, Exit Path, and Duplex Options

Paper, US Bond (Metric)

The size, weight, and type of the paper (print media) determine:

- which paper feed tray can be used
- which paper exit path can be used
- whether you can use double sided (duplex) printing

Single sided printing is also known as simplex printing.

		Feed			Exit	
	Paper (Media) weight	Tray 1	Tray 2 / 3	MP Tray (Manual)	Rear (Face up) Straight-Through	Top (Face down)
Paper, US Bond (Metric)						
17 lb. (64 g/m^2)	Light	S[a]	S[a]	S[a]	S[a]	S[a]
18 to 19 lb. (68 to 71 g/m^2)	Medium light	S[a]	S[a]	S[a]	S[a]	S[a]
20 to 24 lb. (75 to 90 g/m^2)	Medium	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
25 to 27 lb. (91 to 104 g/m^2)	Medium heavy	S, D[a]	S, D[a]	S[a]	S, D[a]	S, D[a]
28 to 32 lb. (105 to122 g/m^2)	Heavy	[b]	[b]	S[a]	S[a]	S[a]
33 to 54 lb. (123 to 203 g/m^2)	Ultra heavy	[b]	[b]	S[a]	S[a]	[b]

a. S = Simplex (printing on one side of the paper)
D = Duplex (printing on both sides of the paper).

b. Not Usable.

Paper (Media)

Weight and Type

Paper Feed, Exit Path, and Duplex Options

Transparencies and Labels

The size, weight, and type of the paper (print media) determine:

- which paper feed tray can be used
- which paper exit path can be used
- whether you can use double sided (duplex) printing

Single sided printing is also known as simplex printing.

		Feed			Exit	
	Paper (Media) weight	**Tray 1**	**Tray 2 / 3**	**MP Tray (Manual)**	**Rear (Face up) Straight-Through**	**Top (Face down)**
Transparencies: Media Weight Ignored						
Set MediaType = Transparency	[b]	S[a]	[b]	S[a]	S[a]	[b]
Labels						
Thickness .004 to .007 in. (0.1 to 0.17 mm)	Medium Heavy	[b]	[b]	S[a]	S[a]	[b]
Thickness .007 to .008 in. (0.17 to 0.2 mm)	Ultra Heavy	[b]	[b]	S[a]	S[a]	[b]

Paper (Media)

Recommendations

Paper

CAUTION

Print media must be able to withstand 446°F (230°C) for 0.2 second.

- For recommended papers,

  see the Handy Reference Guide
  or
  check http://my.okidata.com.
- Paper should be stored flat and away from moisture, direct sunlight and heat sources.
- Don't use damp, damaged or curled paper.
- Using heavily laid or textured paper

  a. seriously shortens the life of the image drum

  b. causes poor print quality.

  Change the media setting to 'Ultra Heavy' to improve print quality.

  When using 'Ultra Heavy':
  - print speed slows
  - the duplex option CANNOT be used.
- Don't use very smooth, shiny or glossy paper.
- Don't use heavily embossed headed paper, very rough paper or paper that has a large grain difference between the two sides.
- Don't use paper with perforations, cut-outs or ragged edges.
- Don't use carbon paper, NCR paper, photosensitive paper, pressure sensitive paper or thermal transfer paper.
- Avoid using recycled paper.

Paper (Media)

Recommendations

Envelopes

CAUTION

Print media must be able to withstand 446°F (230°C) for 0.2 second.

- Use only recommended envelopes (OKI 52206301 and 52206302: see page 561).
- Envelopes should be stored flat and away from moisture, direct sunlight and heat sources.
- Don't use envelopes with windows.
- Don't use envelopes with metal clasps.
- Don't use envelopes with self-sealing flaps.
- Don't use damp, damaged or curled paper envelopes.

Paper (Media)

Recommendations

Labels

CAUTION

Print media must be able to withstand 446°F (230°C) for 0.2 second.

- For recommended labels,

  see the Handy Reference Guide

  or

  check http://my.okidata.com.
- Only use labels designed for color laser printers and photocopiers.
- Labels must cover the entire carrier sheet.
- The carrier sheet or adhesive must not be exposed to any part of the printer.

Adjusting the Color

Adjust the Color Intensity (Color Tuning)

Important!

- In most cases, Color Tuning is not necessary. The printer is optimized for color printing at its default settings.
- Once you change these settings, they remain in effect until you go back in and change them.
- To return the settings to the defaults, use the steps below to set each value back to 0 (zero).

You can use the printer's menu to adjust the color intensity for a specific color by adjusting the HIGHLIGHT, MID-TONE and DARK (shadows) Color Tuning Patterns.

- To *increase* the color intensity, use a higher positive setting (default = 0, maximum = +3).
- To *decrease* the color intensity, use a higher negative setting (default = 0, maximum = -3).

Adjusting the Color

Adjust the Color Intensity (Color Tuning)

Print the Color Tuning Pattern

NOTE

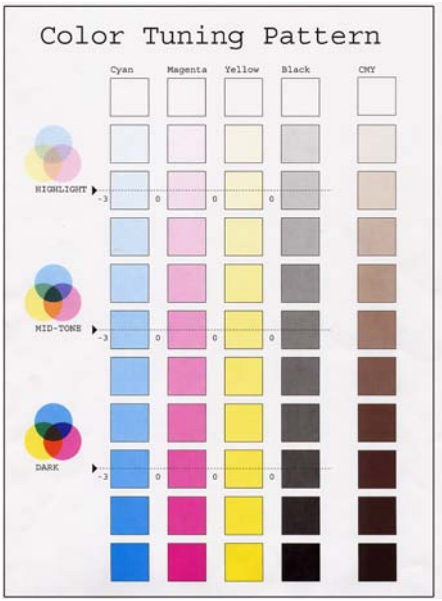
When using the Print Job Accounting utility, you cannot print when "Local Print" is set to "No printing" or "No color printing."

1. Make sure letter size paper is loaded in the tray.
2. Press MENU until **COLOR MENU** displays.
3. Press ITEM (either + or -) until **COLOR TUNING** displays.
4. Press SELECT.
   The Color Tuning Pattern prints.

Adjusting the Color

Adjust the Color Intensity (Color Tuning)

Sample Color Tuning Pattern



Adjusting the Color

Adjust the Color Intensity (Color Tuning)

Example: Adjust the Magenta

To adjust the intensity of the magenta portion:

1. Print the Color Tuning Pattern. See “Print the Color Tuning Pattern” on page 66
2. Adjust the Magenta highlight color.
   a. Press ITEM (either + or -) until **MAGENTA HIGHLIGHT** nn displays.
   b. Press VALUE (either + or -) until the new value you wish to use displays (e.g., +3).
   c. Press SELECT.
   An asterisk (*) appears at the right of the number.
3. Adjust the Magenta mid-tone color.
   a. Press ITEM (either + or -) until **MAGENTA MID-TONE** nn appears.
   b. Press VALUE (either + or -) until the new value you wish to use displays (e.g., nn = +3).
   c. Press the SELECT button.
   An asterisk (*) appears at the right of the number.
4. Adjust the Magenta dark color.
   a. Press ITEM (either + or -) until **MAGENTA DARK** nn displays.
   b. Press VALUE (either + or -) until the new value you wish to use displays (e.g., nn = +3).
   c. Press SELECT.
   An asterisk (*) appears at the right of the number.
5. Press the online button to save the new setting and return the printer to online status
6. Print from your application.

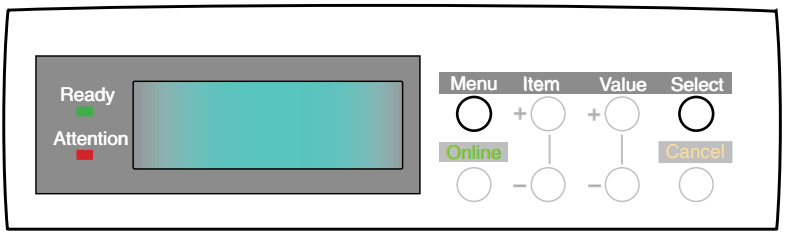
7. Repeat the above steps until you get the desired magenta color intensity.

NOTE

To adjust these settings for the Cyan, Yellow or Black color intensity, substitute the appropriate color name in the steps above.

Printer Settings (Menu Settings)

Printing a list of the Current Settings (MenuMap)

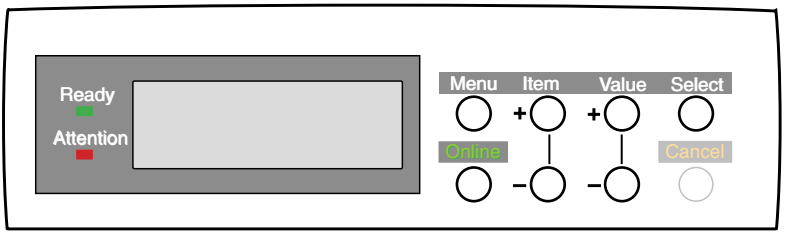


Print the menu to see the current settings for the printer.

1. Make sure paper is in the paper tray.
2. Press MENU until **INFORMATION MENU** displays.
3. Press SELECT. **PRINT MENU MAP** displays.
4. Press SELECT.
5. The Menu (MenuMap) prints.

Printer Settings (Menu Settings)

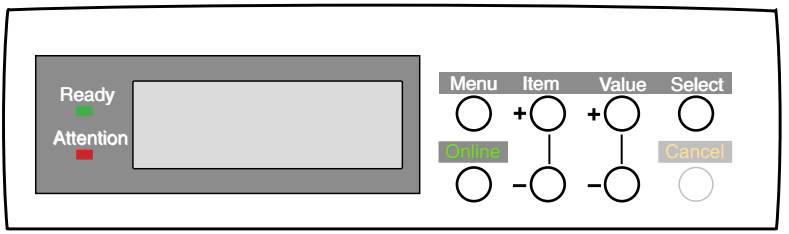
Changing the Printer Settings



1. Press MENU until the required menu displays.
2. Press SELECT.
3. Press ITEM (either + or –) until the required item displays.
4. Press VALUE (either + or –) until the required value displays.
5. Press SELECT
   An asterisk (*) appears next to the selected value.
6. When you are finished, press ONLINE. **ONLINE** displays.

Printer Settings (Menu Settings)

Reset to Factory Defaults



CAUTION

When you reset the printer (menu) settings to the factory defaults, *all* user defined (customized) menu settings are lost!

For lists of the default settings, refer to “Factory Default Settings” on page 562.

1. Press MENU until **MAINTENANCE MENU** displays.
2. Press SELECT.
3. Press ITEM (either + or –) until the **EEPROM RESET** displays.
4. Press SELECT

   The EEPROM initializes. This resets *all* of the user menu settings to factory defaults.

   When you reset the printer (menu) settings to the factory defaults, all user defined (customized) menu settings are lost!
5. When you are finished, press ONLINE. **ONLINE** displays.

Menu (Printer) Settings

Lists of Available Settings by Menu

The following tables list the available choices for the printer (Menu) settings. Each table is a separate menu.

The default settings for the printer are in **bold** text.

Print Jobs Menu

This menu only appears if the hard disk drive is installed.
The default settings are **bold**.

Item	Value	Description
ENTER PASSWORD	****	Enter a password. Use a four-digit number (0~9).
SELECT JOB	No jobs; All jobs; File name 1 to nn	Selects the print job when using Secure Print or Proof and Print.

Information Menu

The default settings are **bold**.

Item	Value	Description
PRINT MENU MAP	Execute	Prints list of current menu (printer) settings.
PRINT FILE LIST	Execute	Prints the job file list.
PRINT PCL FONT	Execute	Prints the PCL font list.
PRINT PS FONT	Execute	Prints the PostScript font list
PRINT IBM PPR FONT	Execute	Prints an IBM PPR font list.
PRINT EPSON FX FONT	Execute	Prints an Epson FX font list.
PRINT DEMO1	Execute	Prints the demonstration page
PRINT ERROR LOG	Execute	Prints the error log.

Test Print Menu

The default settings are **bold**.

Item	Value	Description
PRINT ID CHECK PATTERN	Execute	Ordinarily, you should not use this. Only used by, or under the direction of, Authorized Service Technicians . Prints a test pattern used to check for problems with the image drum.

Shutdown Menu

The default settings are **bold**.

Item	Value	Description
SHUTDOWN START	Execute	Shut down sequence for the printer. When the hard disk is installed, use this sequence to prevent data loss.

Print Menu

The default settings are **bold**.

Item	Value	Description
COPIES	**1** to 999	Sets the number of copies.
DUPLEX	On; **Off**	Specifies double-sided (duplex) printing, if the optional duplex unit is installed.
BINDING	**Long edge**; Short edge	Sets binding for duplex printing. Only displays if the optional duplex unit is installed.
PAPER FEED	**Tray 1**; Tray 2; Tray 3; Tray 4; Tray 5; MP Tray	Selects source of paper feed. Trays 2 to 5 only display if installed
AUTO TRAY SWITCH	**On**; Off	ON: When a paper tray empties, the printer automatically switches to the next available paper tray. See page 37
TRAY SEQUENCE	**Down**; Up; Paper feed tray	If Auto Tray Select/Auto Tray Switch is enabled (ON) [see above], Tray Sequence specifies the order of use for the paper trays. See page 37

Print Menu

The default settings are **bold**.

Item	Value	Description
MP TRAY USAGE	Normal tray; High priority tray; **Feed when mismatching**; Do not use	Specifies MP tray usage. Normal tray: (Tray select/ switch) Use as a normal tray. High priority tray: (Valid with Tray select only). If there is paper in the MP tray and Duplex is not specified, the printer uses the MP tray. Feed when mismatching. When a paper mismatch occurs (i.e. the tray's paper size/media type does not match the print data), a paper request is issued to the MP Tray. If the data is for Duplex print, a specified tray is used instead of the MP tray. Do not use. Even if auto switching, MP Tray is not used. If MP Tray is designated in Paper Feed, printer behaves as though Normal Tray is selected.
MEDIA CHECK	**Enable**; Disable	ENABLE: the printer checks if the paper size specified in the print job matches the actual paper size in the tray. Only standard sizes are checked.
TRANSPARENCY DETECT	**Auto**; Disable	Enable/Disable the transparency auto detect function.
RESOLUTION	C7350 - **600 x 1200 dpi**; 600 dpi C7550 -**1200 dpi**, Fast 1200 dpi, 600 dpi	Selects print resolution.
TONER SAVE MODE	ON; **OFF**	ON: Enables Toner Save mode. OFF: Disables Toner Save mode. See page 30.

Print Menu

The default settings are **bold**.

Item	Value	Description
MONO-PRINT SPEED	**Auto**; Color speed; Normal speed	Selects monochrome printing speed. Auto: Prints at the most appropriate speed for the type of printing being done. Color: Always prints at the color print speed. Normal: Always prints at the monochrome print speed.
ORIENTATION	**Portrait**; Landscape	Sets page orientation for printing.
LINE PER PAGE	5 to 128. Default = **60**.	Sets the number of lines that can be printed on a page (standard letter-size). Invalid in PostScript.
EDIT SIZE	**Cassette size**; Letter; Executive; Legal 14; Legal 13.5; Legal 13; A4; A5; A6; B5; Custom; Com-9* envelope; Com-10* envelope ; Monarch* envelop e; DL* Envelope; C5* Envelope *Use short edge feed.	*Cassette size* is selected when using standard sized paper in the paper tray. *Edit size* is only used when printing one page size onto a different paper size. Example: To print A6 onto A4, set Edit Size to A6. The actual paper in paper tray is A4. Invalid in PostScript emulation. Page size = the size of the paper the document is formatted to use, Paper size = the size of the paper the document is printed on.

Media Menu

The default settings are **bold**.

Item	Value	Description
TRAY 1 MEDIATYPE	**Plain**; Letterhead; Transparency; Bond; Recycled; Card stock; Rough	Selects the paper (media) type for Tray 1.
TRAY 1 MEDIAWEIGHT	**Auto**; Light; Medium Light; Medium; Medium Heavy; Heavy; Ultra Heavy	Sets the paper (media) weight for Tray 1
TRAY 2 MEDIATYPE	**Plain**; Letterhead; Bond; Recycled; Card stock; Rough	Sets the paper (media) type for optional Tray 2. (Only displays if installed)
TRAY 2 MEDIAWEIGHT	**Auto**; Light; Medium Light; Medium; Medium Heavy; Heavy; Ultra Heavy	Selects the paper (media) weight for optional Tray2. (Only displays if installed)
TRAY 3 MEDIATYPE	**Plain**; Letterhead; Bond; Recycled; Card stock; Rough	Sets the paper (media) type for optional Tray 3. (Only displays if installed)
TRAY 3 MEDIAWEIGHT	**Auto**; Light; Medium Light; Medium; Medium Heavy; Heavy; Ultra Heavy	Selects the paper (media) weight for optional Tray 3. (Only displays if installed)

Media Menu

The default settings are **bold**.

Item	Value	Description
MP TRAY PAPER SIZE	A4; A5; A6; B5; Legal 14; Legal 13.5; Legal 13; **Letter**; Executive; Custom; Com-9 envelope; Com-10 envelope; Monarch envelope; DL Envelope; C5 Envelope	Sets the paper (media) size for the multi purpose paper tray. LEF = Long Edge Feed
MP TRAY MEDIA TYPE	**Plain**; Letterhead; Transparency; Labels; Bond; Recycled; Card stock; Rough	Selects the paper (media) type for multi purpose paper tray.
MP TRAY MEDIAWEIGHT	**Auto**; Light; Medium Light; Medium; Medium Heavy; Heavy; Ultra Heavy	Sets the paper (media) weight for the multi purpose (MP) paper tray.
UNIT OF MEASURE	**inches**; Millimeter	Sets the units of measurement for custom paper (media) size.
X DIMENSION (INCH)	3 inches to 8.5 inches (127 mm to 1200 mm) Default = **8.5 inches (279.4 mm)**	Sets the width of custom paper (media). To use this setting, the MP Tray Paper Size setting must be set to Custom.
Y DIMENSION (INCH)	5 inches to 35.5 inches Default = **11 inches**	Sets the length of custom paper (media). To use this setting, the MP Tray Paper Size setting must be set to Custom.

Color Menu

The default settings are **bold**.

Item	Value	Description
AUTO DENSITY MODE	**Auto**; Manual.	Select whether density adjustment and Toner Reproduction Curve (TRC) compensation is automatic. Auto: Density adjustment is automatically run under specified conditions, and reflected in the TRC compensation. Manual: Density adjustment is done manually (see “Adjust the Color Intensity (Color Tuning)” on page 65).
ADJUST DENSITY	Execute	If EXECUTE is selected, the printer immediately adjusts density and reflects it in the Toner Reproduction Curve (TRC) compensation. Perform when the printer is idle. May not work if the printer is not idle.
COLOR TUNING	Print pattern	Ordinarily, you do not use Color Tuning, because TRC is automatically adjusted. If you want to manually adjust the Toner Reproduction Curve (TRC), use Color Tuning to print the test pattern. Change the settings for the HIGHLIGHT, MID-TONE, and DARK for each color (CMYK). Keep changing the settings until you obtain your desired print quality. See “Adjust the Color Intensity (Color Tuning)” on page 65.

Color Menu

The default settings are **bold**.

Item	Value	Description
CYAN, MAGENTA, YELLOW OR BLACK HIGHLIGHT	**0**+1+2+3-3-2-1	Adjusts HIGHLIGHT (light area) of Cyan, Magenta, Yellow or Black Toner Reproduction Curve (TRC). Plus = darker Minus = lighter See “Adjust the Color Intensity (Color Tuning)” on page 65.
CYAN, MAGENTA, YELLOW OR BLACK MID-TONE	**0**+1+2+3-3-2-1	Adjusts MID-TONE of Cyan, Magenta, Yellow or Black Toner Reproduction Curve (TRC). Plus = darker Minus = lighter See “Adjust the Color Intensity (Color Tuning)” on page 65.
CYAN, MAGENTA, YELLOW OR BLACK DARK	**0**+1+2+3-3-2-1	Adjusts DARK of Cyan, Magenta, Yellow or Black Toner Reproduction Curve (TRC). Plus = darker Minus = lighter See “Adjust the Color Intensity (Color Tuning)” on page 65.
CYAN, MAGENTA, YELLOW OR BLACK DARKNESS	**0**+1+2+3-4-3-2-1	Adjusts Cyan, Magenta, Yellow or Black engine density. The Darkness settings for each color are reflected as offset values (additions) to the corrections through the Adjust Density/Toner Reproduction Curve (TRC) Compensation function.
ADJUST REGISTRATION	Execute	Execute: the printer performs an Auto Adjust Registration. Perform when the printer is idle. May not work if the printer is not idle.

Color Menu

The default settings are **bold**.

Item	Value	Description
CYAN REGISTRATION - FINE ADJUST	-3, -2, -1, **0,** +1, +2, +3	Use this to correct color misalignment when printing. Adjusts the image registration of Cyan, Magenta or Yellow (CMY) relative to Black (K). Adjustments are made in increments of 1/1200th of an inch (21.17 microns). If you change the current setting to a more *positive* value, the value *increases*. Color registration moves DOWN the page, in the opposite direction to the printing paper feed movement. If you change the current setting to a more *negative* value, the value *decreases*. Color registration moves UP the page, in the same direction to the printing paper feed movement. The adjustment is shown as an offset value for the color registration settings measured by the printer during Auto Color Registration.
MAGENTA REGISTRATION - FINE ADJUST	-3, -2, -1, **0,** +1, +2, +3	
YELLOW REGISTRATION - FINE ADJUST	-3, -2, -1, **0,** +1, +2, +3	
INK SIMULATION	**Off**; SWOP	The printer has its own process simulation generator, which simulates standard colors in the printer. PostScript only.
INK LIMIT	**Dark**; Medium; Light	Sets the thickness of the toner layer. If paper curls when using DARK, select MEDIUM or LIGHT. This should help reduce the curling.

Color Menu

The default settings are **bold**.

Item	Value	Description
CMY 100% DENSITY	**Disable**; enable	Normally, you won't change this setting. In normal printing, Color Matching controls the TRC values. In turn, the TRC values control the print density ENABLE = 100% CMY density output [relative to the Toner Reproduction Curve (TRC)] CMY 100% Density is only used in very special instances. Example: Specify the color for CMYK color space in PS.

System Configuration Menu

The default settings are **bold**.

Item	Value	Description
POWER SAVE DELAY TIME	5 min; 15 min; 30 min; **60 min**; 240 min	Sets the time the printer "waits" before entering power save mode See page 45.
PERSONALITY	**Auto emulation**; PCL; IBM PPR III XL; Epson FX; AdobePostScrip	Selects the printer emulation language. The *only* printer languages that can be selected are those enabled through the Personality item of the service-only Maintenance Menu. The Maintenance Menu is only accessed by Authorized Service Technicians.
USB PS-PROTOCOL	ASCII **RAW**	Specifies PostScript (PS) communication protocol mode of data from USB. In RAW mode, Ctrl-T is invalid.
NETWORK PS PROTOCOL	ASCII **RAW**	Specifies PostScript (PS) communication protocol mode of data from the network print server. In RAW mode, Ctrl-T is invalid.
CLEARABLE WARNING	**ON**; Job	**PCL**: Controls how error messages are displayed. On = press SELECT to display the error. Job = the error remains displayed until the next print job is received. **PostScript (PS)**: Error messages are only shown during the print job, regardless of setting.
AUTO CONTINUE	On; **Off**	ON = printer recovers automatically after a memory overflow or print overrun.
MANUAL TIMEOUT	**60 sec**; 30 sec; Off	This is the time the printer "waits" to cancel a print job when paper is *not* inserted after a request for paper is issued. PostScript (PS) only.

System Configuration Menu

The default settings are **bold**.

Item	Value	Description
WAIT TIMEOUT	Off; 5 sec to 300 sec; default = **40 sec**	PCL: Wait Timeout is the length of time the printer "waits" before automatically printing and ejecting received data when no end page code or data end code is received PostScript: The job is cancelled, regardless of the setting.
LOW TONER	**Continue**; Stop	When LOW TONER displays, CONTINUE: printing continues STOP: printing stops. The printer goes offline.
JAM RECOVERY	**ON**; OFF	Determines whether or not printing continues after a paper jam has been cleared. OFF: Cancels (after the paper jam is cleared) the print job being printed when the paper jam occurred. ON: Continues (after the paper jam is cleared) the print job being printed when the paper jam occurred.
ERROR REPORT	ON; **Off**	ON: Error Report prints when internal error occurs. PostScript only.
LANGUAGE	**English**; German; French; Italian; Spanish; Swedish; Norwegian; Danish; Dutch; Turkish; Portuguese; Polish	Selects the language of the printer display.

PCL Emulation Menu

The default settings are **bold**.

Item	Value	Description
FONT SOURCE	**Resident**; DIMM0; Downloaded	Selects the location of the PCL fonts. DIMM0 Only displays if the font DIMM ROM is installed. Downloaded displays only if fonts have been downloaded to the printer.
FONT NO.	**I000**, C001, S001	Sets the PCL font number. I = internal (resident font); I000 = Courier. C = Font stored in the printer's Flash memory. S = downloaded soft font, stored on the printer's internal hard disk drive. Only applies if the printer has a hard disk drive installed.
FONT PITCH	0.44 cpi to 99.99 cpi in 0.01 cpi increments Default = **10.00 cpi**	Sets the font width in characters per inch. Only displays if the font is a fixed-space outline font.
FONT HEIGHT	4.00 to 999.75 point, in 0.25 point increments Default = **12.00 point**	Sets the font point size. Only applies only to fixed fonts Does not apply to proportional fonts.

PCL Emulation Menu

The default settings are **bold**.

Item	Value	Description
SYMBOL SET	**PC-8**, PC-8 Dan/Nor, PC-8 TK, PC-775, PC-850, PC-852, PC-855, PC-857 TK, PC-858, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish, Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Blt, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, Wingdings, Dingbats MS, Symbol, OCR-A, OCR-B, HP ZIP, USPSFIM, USPSSTP, USPSZIP, Bulgarian, CWI Hung, DeskTop, German, Greek-437, Greek-437 Cy, Greek-928, Hebrew NC, Hebrew OC, IBM-437, IBM-850, IBM-860, IBM-863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, Kamenicky, Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N, PC Set2 US	Selects a PCL character symbol set

PCL Emulation Menu

The default settings are **bold**.

Item	Value	Description
A4 PRINT WIDTH	**78** column; 80 column	If you are printing a letter size document on an A4 size sheet, select 80 column. This condenses the print to fit on the slightly narrower A4 sheet, without changing the line breaks.
White page skip	**OFF**; ON	PCL only ON: blank pages do not print
CR function	**CR**; CR+LF	PCL only When the printer receives a CR code: CR: carriage return performed CR+FL carriage return with line feed performed.
LF function	**LF**; LF+CR	PCL only When the printer receives a LF code: LF: line feed performed LF+CR: line feed with carriage return performed.
Print margin	**Normal**; 1/5 inch; 1/6 inch	Sets unprintable paper area (margin). Normal: PCL emulation compatible 1/5 inch: domestic model emulation. 1/6 inch: HIPER-W emulation.
True Black	**OFF**; ON	PCL only Determines whether to use Composite Black (CMYK mixed) or True Black (K only) for the black (100%) in image data. OFF = Composite (CMYK) Black. Provides best results when printing photographs. ON = Pure Black (black toner only). Provides best results when printing a combination of text and graphics. See page 31.

PCL Emulation Menu

The default settings are **bold**.

Item	Value	Description
Pen width adjust	**ON**; OFF	PCL only ON: Emphasizes the pen width of very fine lines (minimum line width). This improves the appearance of the lines.

PPR Emulation Menu

The default settings are **bold**.

Item	Value	Description
Character pitch	**10 CPI**; 12 CPI; 17 CPI; 20 CPI; PROPORTIONAL	Specifies character pitch in IBM PPR emulation.
Font condense.	**12 CPI TO 20 CPI**; 12 CPI TO 12 CPI	Specifies 12 cpi pitch for Condense Mode
Character set	Set 1; **Set 2**	Specifies a character set.

PPR Emulation Menu

The default settings are **bold**.

Item	Value	Description
Symbol set	PC-8, PC-8 Dan/Nor, PC-8 TK, PC-775, PC-850, PC-852, PC-855, PC-857 TK, PC-858, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish, Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Blt, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, Kamenicky, Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N, PC Set2 US, Bulgarian, CWI Hung, DeskTop, German, Greek-437, Greek-437 Cy, Greek-928, Hebrew NC, Hebrew OC, **IBM-437**, IBM-850, IBM-860, IBM-863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9	Specifies a symbol set.

PPR Emulation Menu

The default settings are **bold**.

Item	Value	Description
LETTER 0 STYLE	**Disable**; Enable	Enable: 9BH (Hex) = letter o 9DH (Hex) = zero (number).
ZERO CHARACTER	**Normal**; Slashed	Normal: zero unslashed. Slashed: zero slashed
LINE PITCH	**6 LPI**; 8 LPI	Specifies the line spacing in lines per inch (lpi).
WHITE PAGE SKIP	**OFF**; ON	ON: blank pages do not print Does not apply when duplexing.
CR FUNCTION	**CR**; CR+LF	PPR only. When the printer receives a CR code: CR: carriage return performed CR+LF carriage return with line feed performed.
LF FUNCTION	**LF**; LF+CR	PPR only. When the printer receives a LF code: LF: line feed performed LF+CR: line feed with carriage return performed.
LINE LENGTH	**80 COLUMN**; 136 COLUMN	Specifies the number of characters per line.
FORM LENGTH	**11 INCH**; 11.7 INCH; 12 INCH	Specifies the paper length.
TOF POSITION	**0.0** to 1.0 INCH, in 0.1-inch increments	The print start position is where printing begins on the page. It is also called Top of Form (TOF). TOF Position = the distance between the first line of print and the top edge of the paper.
LEFT MARGIN	**0.0** to 1.0 INCH, in 0.1-inch increments	Left Margin = the distance between where printing begins and the left hand edge of the paper.
FIT TO LETTER	Disable; **Enable**	Enable: Print data is reduced to fit the LETTER-size (11 inches, 66 lines) print area.

PPR Emulation Menu

The default settings are **bold**.

Item	Value	Description
TEXT HEIGHT	**Same**; Diff	Sets the height of a character. SAME: Height constant, regardless of cpi. DIFF: Height varies, depending on cpi.

FX Emulation Menu

The default settings are **bold**.

Item	Value	Description
CHARACTER PITCH	**10 CPI;** 12 CPI; 17 CPI; 20 CPI; PROPORTIONAL	Specifies character pitch.
CHARACTER SET	Set 1; **Set 2**	Specifies which Epson character set is used.

FX Emulation Menu

The default settings are **bold**.

Item	Value	Description
SYMBOL SET	PC-8, PC-8 Dan/Nor, PC-8 TK, PC-775, PC-850, PC-852, PC-855, PC-857 TK, PC-858, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish, Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Blt, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, Kamenicky, Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N, PC Set2 US, Bulgarian, CWI Hung, DeskTop, German, Greek-437, Greek-437 Cy, Greek-928, Hebrew NC, Hebrew OC, **IBM-437**, IBM-850, IBM-860, IBM-863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9	Specifies a symbol set.
LETTER 0 STYLE	**Disable**; Enable	Enable: 9BH (Hex) = letter o 9DH (Hex) = zero (number).

FX Emulation Menu

The default settings are **bold**.

Item	Value	Description
ZERO CHARACTER	**Normal**; Slashed	Normal: zero unslashed. Slashed: zero slashed
LINE PITCH	**6 LPI**; 8 LPI	Specifies the line spacing in lines per inch (lpi).
WHITE PAGE SKIP	**OFF;** ON	ON: blank pages do not print Does not apply when duplexing.
CR FUNCTION	**CR**; CR+LF	FX only. When the printer receives a CR code: CR: carriage return performed CR+LF carriage return with line feed performed.
LF FUNCTION	**LF**; LF+CR	FX only. When the printer receives a LF code: LF: line feed performed LF+CR: line feed with carriage return performed.
LINE LENGTH	**80 COLUMN**; 136 COLUMN	Specifies the number of characters per line.
FORM LENGTH	**11 inch**; 11.7 inch; 12 inch	Specifies the paper length.
TOF POSITION	**0.0** to 1.0 inch in 0.01-inch increments	The print start position is where printing begins on the page. It is also called Top of Form (TOF). TOF Position = the distance between the first line of print and the top edge of the paper.
LEFT MARGIN	**0.0** to 1.0 inch in 0.01-inch increments	Left Margin = the distance between where printing begins and the left hand edge of the paper.
FIT TO LETTER	Disable; **Enable**	Enable: Print data is reduced to fit the LETTER-size (11 inches, 66 lines) print area.

FX Emulation Menu

The default settings are **bold**.

Item	Value	Description
TEXT HEIGHT	**Same**; Diff	Sets the height of a character. SAME: Height constant, regardless of cpi. DIFF: Height varies, depending on cpi.

Parallel Menu

The defaults are **bold**.

Item	Value	Description
PARALLEL	**Enable**; Disable	Enable: Activates the parallel (Centronics) interface.
BI-DIRECTION	**Enable**; Disable	Enable: Activates bi-directional communication.
ECP	**Enable**; Disable	Enable: Activates ECP mode.
ACK WIDTH	**Narrow**; MEDIUM; WIDE	Sets the ACK width for compatible reception: Narrow = 0.5 µS Medium = 1.0 µS Wide = 3.0 µS
ACK/BUSY TIMING	**ACK-in-Busy;** ACK-while-Busy	Sets the output order for ACK and BUSY during reception. ACK IN BUSY: BUSY=LOW to the end of the ACK pulse ACK WHILE BUSY: BUSY=LOW to the centre of the ACK pulse.
I-PRIME	3 micro-sec; 50 micro- sec; **Disable**	Sets or disables the i-Prime signal
OFFLINE RECEIVE	Enable; **Disable**	When set to Enable The printer receives data even if: • an alarm/error occurs. • the online button is pressed. The printer issues a BUSY signal *only:* • when the receive buffer is full. • when a service call occurs.

USB Menu

The default settings are **bold**.

Item	Value	Description
USB	**Enable**; Disable	Enable: Activates the USB interface.
SOFT RESET	Enable; **Disable**	Enable: With Soft Reset, a software string (not a hardware function) can be sent to the USB port to flush all USB buffers and reset all USB pipes to defaults. This reset DOES NOT change the USB addressing or USB configuration.
OFFLINE RECEIVE	Enable; **Disable**	When set to Enable The printer receives data even if: • an alarm/error occurs. • the online button is pressed. The printer issues a BUSY signal *only:* • when the receive buffer is full. • when a service call occurs.

Network Menu

Only appears if the network card is installed.

The default settings are **bold**.

Item	Value	Description
TCP/IP	**Enable**; Disable	Enable: Selects TCP/IP protocol.
NETWARE	**Enable**; Disable	Enable: Selects Netware protocol.
ETHERTALK	**Enable**; Disable	Enable: Selects EtherTalk protocol.
NETBEUI	**Enable**; Disable	Enable: Selects NetBEUI protocol.
FRAME TYPE	**Auto**; 802.2; 802.3 Ether-II; Snap	Enable: Selects the Ethernet frame type.
DHCP/BOOTP	**Enable**; Disable	Enable: DHCP/BOOTP is selected automatically.
RARP	Enable; **Disable**	Enable: RARP is selected automatically.
IP ADDRESS	xxx.xxx.xxx.xxx	Configures IP address. Uses 12 alphanumeric characters.
SUBNET MASK	xxx.xxx.xxx.xxx	Configures subnet mask. Uses 12 alphanumeric characters.
GATEWAY ADDRESS	xxx.xxx.xxx.xxx	Configures gateway address Uses 12 alphanumeric characters.
PRINT SETTINGS	ON; **OFF**	ON = When the printer exits Menu Mode, the Network MenuMap prints. The Network MenuMap shows the results of self-diagnosis tests and the current network printer settings.
INITIALIZE	ON; **OFF**	ON = When the printer exits Menu Mode, the network initializes.

Memory Menu

The default settings are **bold**.

Item	Value	Description
RECEIVE BUFF SIZE	**Auto**; OFF; 0.5 MB; 1 MB; 2 MB; 4 MB; 8 MB; 16 MB; 32 MB	Sets the size of the receive buffer. Depends on the amount of memory installed in the printer.
RESOURCE SAVE	AUTO; **Off**; 0.5 MB; 1 MB; 2 MB; 4 MB; 8 MB; 16 MB; 32 MB	Set the size of the font cache area. Depends on the amount of memory installed in the printer.
FLASH INITIALIZE	Execute	Ordinarily, you should not use this. Initializes flash memory (if installed)
PS FLASH RESIZE	0% [n.n MB] TO 90% [n.n MB], in 10% increments	Ordinarily, you should not use this. Changes the size of the flash memory area. “n.n” indicates the actual size in MB. You cannot specify 100%, because special data is stored in the Flash Memory.

Disk Maintenance Menu

CAUTION!

Unless you know what you are doing, do not use this Menu!

The System Administrator (or someone who is knowledgeable in this area) should use the Storage Device Manager software to perform disk maintenance.

Use the Disk Maintenance Menu to:

- **initialize the printer's internal hard disk drive,**
- **reassign the partition contents, and**
- **reformat the partitions.**

Disk Maintenance Menu

Only appears if the hard disk drive is installed.

The default settings are **bold**.

Item	Value	Description
HDD INITIALIZE	EXECUTE	Partitions the hard disk and formats each partition.
PARTITION SIZE	nnn% / mmm% / xxx%	Sets usage of hard disk drive partitions: nnn = Common mmm = PCL xxx = PS Range for each partition: 1 to 98% in 1% increments. nnn + mmm + xxx = 100%.
HDD FORMATTING	**PCL**, COMMON, PS	Formats specified partition.

System Adjust Menu

The default settings are **bold**.

Item	Value	Description
X ADJUST	**0.00 mm**; Range +0.25 TO +2.0 MM and – 2.0 TO –0.25 MM in 0.25 mm increments	Horizontal adjustment of the overall print position, in 0.25 mm increments.
Y ADJUST	**0.00 mm**; Range +0.25 TO +2.0 MM and – 2.0 TO –0.25 MM in 0.25 mm increments	Vertical adjustment of the overall print position, in 0.25 mm increments.
DUPLEX X ADJUST	**0.00 mm**; Range +0.25 TO +2.0 MM and – 2.0 TO –0.25 MM in 0.25 mm increments	Horizontal adjustment of the overall print position of the back (verso/second) page, in 0.25 mm increments.
DUPLEX Y ADJUST	**0.00 mm**; Range +0.25 TO +2.0 MM and – 2.0 TO –0.25 MM in 0.25 mm increments	Vertical adjustment of the overall print position of the back (verso/second) page, in 0.25 mm increments.
TRAY 1 LEGAL 14	**Legal 14**; Legal 13.5	Sets Tray 1 legal paper size.
TRAY 2 LEGAL 14	**Legal 14**; Legal 13.5	Sets Tray 2 legal paper size.
TRAY 3 LEGAL 14	**Legal 14**; Legal 13.5	Sets Tray 3 legal paper size.

System Adjust Menu

The default settings are **bold**.

Item	Value	Description
PCL TRAY 2 ID#	1 to 59; default = **5**	Sets Tray 2 number for PCL emulation.
PCL TRAY 3 ID#	1 – 59; default = **20**	Sets Tray 3 number for PCL emulation.
PCL MP TRAY ID#	1 – 59; default = **4**	Sets MP Tray number for PCL emulation.
DRUM CLEANING	OFF; **ON**	ON: The printer cleans the drum before printing. Drum cleaning can help prevent unwanted horizontal white lines. Drum cleaning shortens image drum life.
HEX DUMP	Execute	Press SELECT to place the printer in Hexadecimal (Hex) Dump Mode. In Hex Dump Mode, all received data is printed in both Hexadecimal and ASCII format. This information is often used when troubleshooting printer problems. To return to normal print mode, turn off the printer, then turn it on.

Maintenance Menu

The default settings are **bold**.

Item	Value	Description
EEPROM RESET	Execute	Resets all User Menu settings to factory defaults. All user defined (customized) settings are lost.
SAVE MENU	Execute	Saves the current printer (menu) settings.
RESTORE MENU	Execute	Restore Menu is *not* the same as Reset to Factory defaults. Restore Menu resets the menu to the last *saved* set of customized (user defined) settings. If the settings have *not* been changed from the factory defaults, Restore Menu cannot be accessed.
POWER SAVE	**Enable**; Disable	When no input is received for a specified time, the printer enters Power Save Mode. See “POWER SAVE Mode” on page 45. See also “Power Save Delay Time” under the System Configuration Menu on page 86.
PAPER BLACK SETTING	–2; –1; **0**; +1; +2	Not normally used.
PAPER COLOR SETTING	–2; –1; **0**; +1; +2	Not normally used.
TRANSPR BLACK SETTING	–2; –1; **0**; +1; +2	Not normally used.
TRANSPR COLOR SETTING	–2; –1; **0**; +1; +2	Not normally used.

Usage Menu

Item	Value	Description
TOTAL PAGE COUNT	nnnnnn	Shows total number of pages printed.
TRAY 1 PAGE COUNT	nnnnnn	Shows number of pages printed from Tray 1.
TRAY 2 PAGE COUNT	nnnnnn	Shows number of pages printed from Tray 2. Displayed if optional Tray 2 is installed.
TRAY 3 PAGE COUNT	nnnnnn	Shows number of pages printed from Tray 3. Displayed if optional Tray 3 is installed.
MP TRAY PAGE COUNT	nnnnnn	Shows number of pages printed from Multi purpose Paper Tray.
COLOR PAGE COUNT	nnnnnn	Number of pages printed in color.
MONOCHROME PAGE COUNT	nnnnnn	Number of pages printed in monochrome.

Usage Menu

Item	Value	Description
BLACK DRUM LIFE	Remaining nnn%	Displays the remaining life of the black image drum (as a percentage).
CYAN DRUM LIFE	Remaining nnn%	Displays the remaining life of the cyan image drum (as a percentage).
MAGENTA DRUM LIFE	Remaining nnn%	Displays the remaining life of the magenta image drum (as a percentage).
YELLOW DRUM LIFE	Remaining nnn%	Displays the remaining life of the yellow image drum (as a percentage).
BELT LIFE	Remaining nnn%	Displays the remaining life of the belt (as a percentage).
FUSER LIFE	Remaining nnn%	Displays the remaining life of the fuser roller (as a percentage).
BLACK TONER	15K = xxx% 5K =yyy%	Displays the remaining life of the black toner (as a percentage).
CYAN TONER	15K = xxx%; 5K = yyy%	Displays the remaining life of the cyan toner (as a percentage).
MAGENTA TONER	15K = xxx% 5K = yyy%	Displays the remaining life of the magenta toner (as a percentage).
YELLOW TONER	15K = xxx% 5K = yyy%	Displays the remaining life of the yellow toner (as a percentage).

Windows XP Printer Drivers

See your printed *Software Installation Guide* for information on installing printer drivers.

You can also go to **http://my.okidata.com** to view and/or download a copy of the *Software Installation Guide* or for the latest information on drivers for your printer.

Which Printer Driver to Use?

Your printer comes with Windows drivers for PCL and Adobe® PostScript® (PS). You can install either of these, or both if you wish. Which driver you choose depends on your application.

- If you use TrueType fonts and you do not print PostScript (including ".eps" files) graphics, choose the PCL driver. This is more efficient and gives good results.
- If you use PostScript fonts or print PostScript graphics, choose the PostScript driver. In this situation, performance is faster and graphics are printed at their best quality.

NOTE

The line art graphics in this manual are PostScript. If you plan to print parts of this manual, choose the PostScript driver. Otherwise, the line art graphics print at low resolution. The print quality may not be satisfactory.

If neither driver seems to cover all your needs, you should install both drivers. Select the same printer port (LPT1 or Network Port) for both drivers during the installation.

Set the driver you plan to use most of the time to be your Windows default driver. Most applications allow you to choose a different printer from within the print dialog, so you can use the alternative driver for printing whenever you need to.

Memory: Enabling

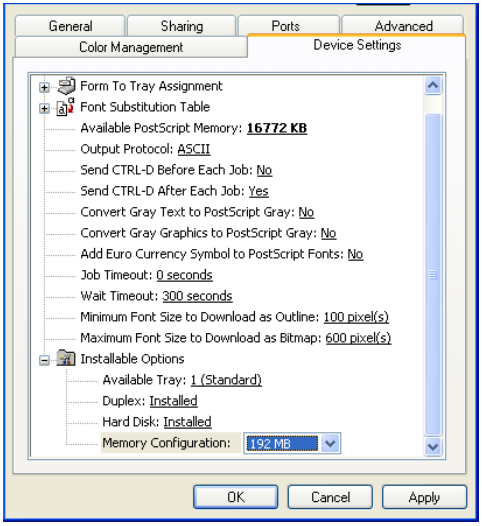
PostScript Only

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

If you have additional memory in your printer, use these instructions to update the Windows PostScript driver so that it recognizes the additional memory:

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, click **Memory Configuration**, then set the memory in the drop-down list to be the same as that now installed in the printer, as shown in the Menu Map.
   To print the Menu Map, see “Printer Settings (Menu Settings)” on page 70.
5. Click **OK**. Close the Printers and Faxes dialog box.



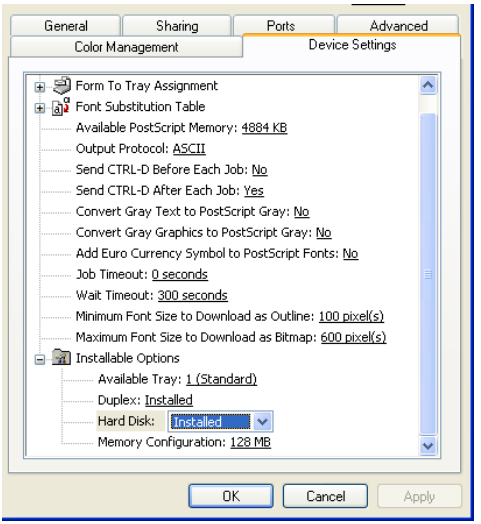
Hard Disk Drive: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, make sure the setting in the **Hard Disk** drop-down list is **Installed**.
5. Click **OK**. Close the Printers and Faxes dialog box.



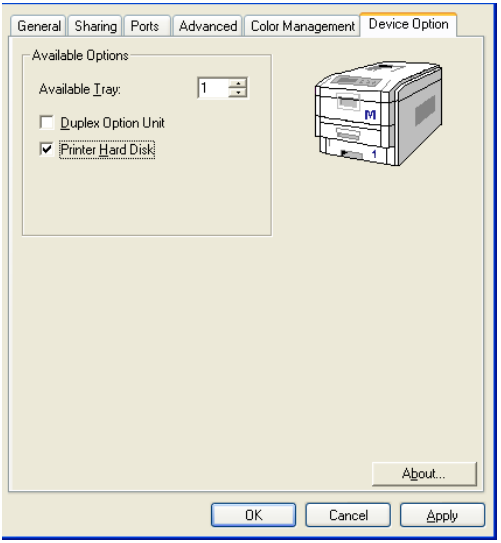
Hard Disk Drive: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. On the **Device Option** tab, click **Printer Hard Disk**.
4. Click **OK**. Close the Printers and Faxes dialog box.



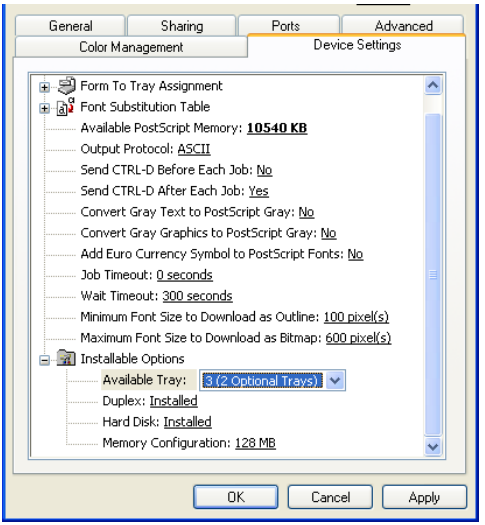
Paper Trays: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab. Under **Installable Options**, click **Available Trays**, then select the appropriate number of trays (not including the Multi-purpose tray) in the drop-down list.
4. Click **OK**. Close the Printers and Faxes dialog box.



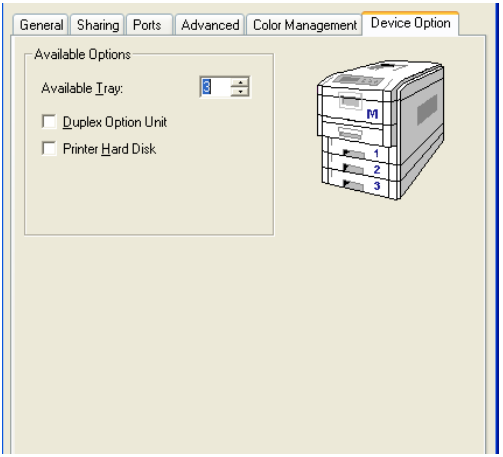
Additional Paper Trays: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. On the **Device Option** tab, select the appropriate number of trays (not including the Multi-purpose tray).
4. Click **OK**. Close the Printers and Faxes dialog box.



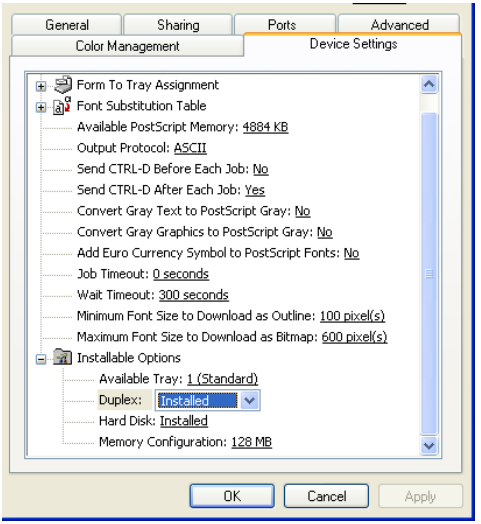
Duplex Unit: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab. Under **Installable Options**, click **Duplex** and select **Installed** in the drop-down list.
4. Click **OK**. Close the Printers and Faxes dialog box.



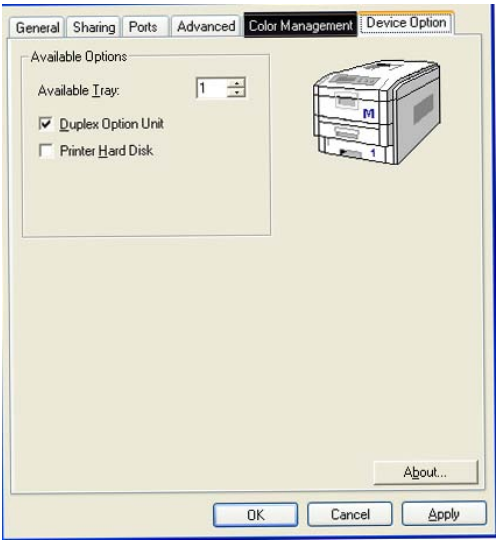
Duplex Unit: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Option** tab, click **Duplex Option Unit**.
4. Click **OK**. Close the Printers and Faxes dialog box.



Paper Feed, Size and Media

Changing Defaults

PostScript

The normal default for these items is automatic detection.

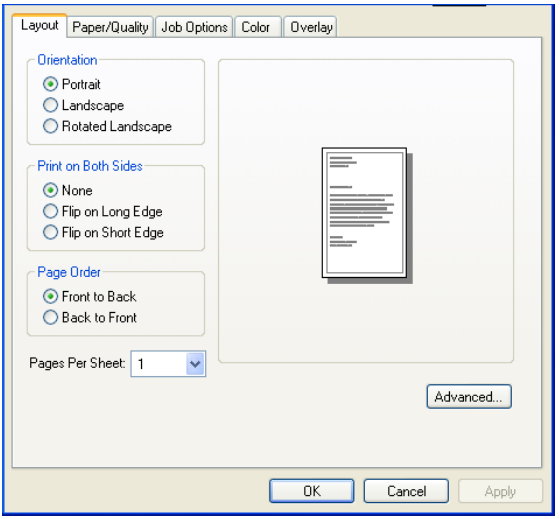
NOTE

If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Right click the printer name. Click **Printing Preferences**.

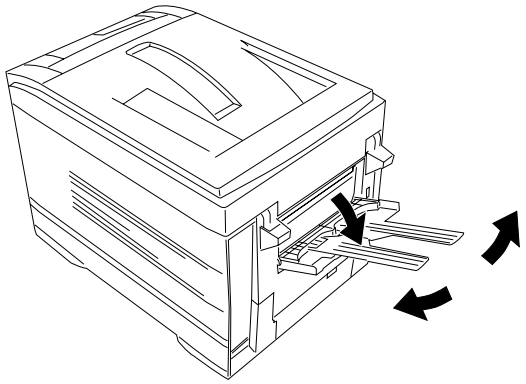


Important!

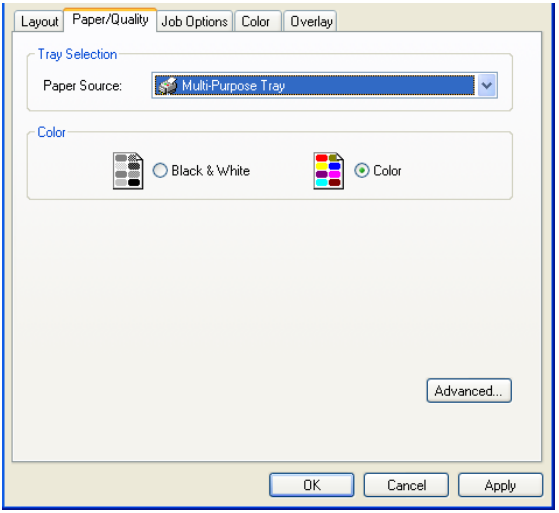
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

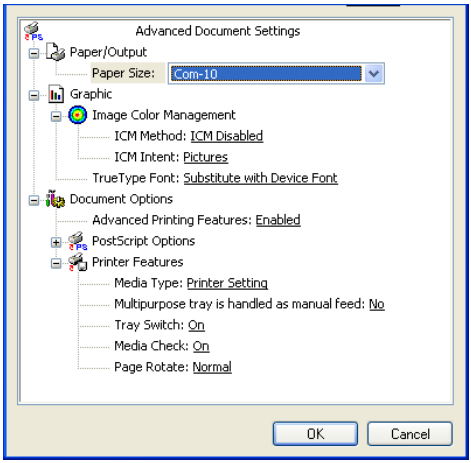
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



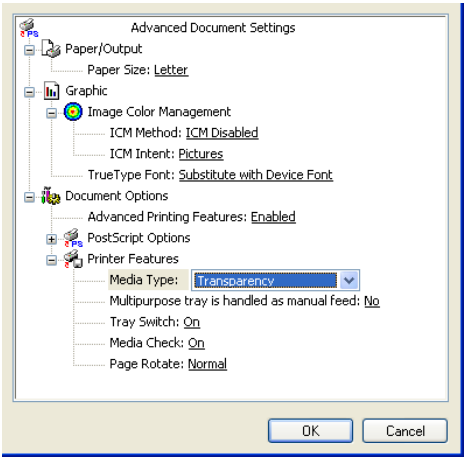
3. Click the **Paper/Quality** tab. Under **Tray Selection**, in the **Paper Source** drop-down list, select the paper feed.



4. Click the **Advanced** button.
5. Under **Paper/Output**, in the **Paper Size** drop-down list, select the media size.



6. Under **Document Options** → **Printer Features**, click **Media Type** and select the media from the drop-down list.
7. Click **OK** twice. Close the Printers and Faxes dialog box.



Paper Feed, Size and Media

Changing Defaults

PCL

The normal default for these items is automatic detection.

NOTE

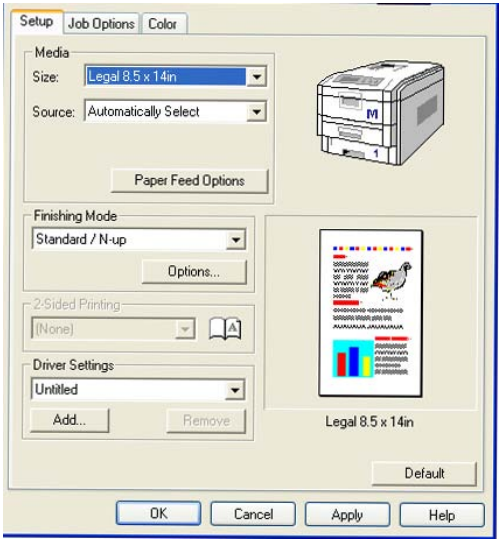
If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

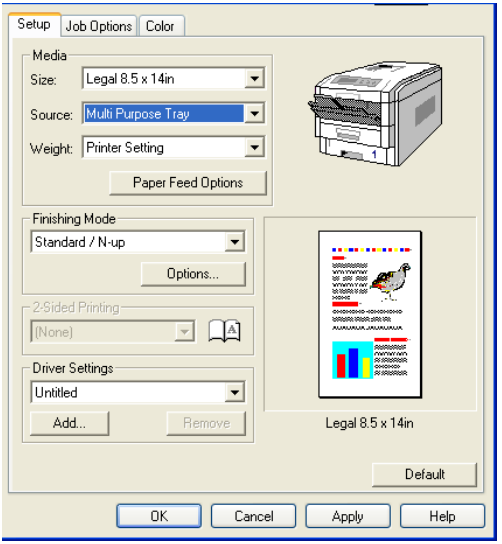
The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

1. Click **Start** → **Settings** → **Printers and Faxes**.
2. Right click the printer name. Click **Printing Preferences**.

3. On the **Setup** tab, under **Media**, select the required paper size in the **Size** drop-down list.



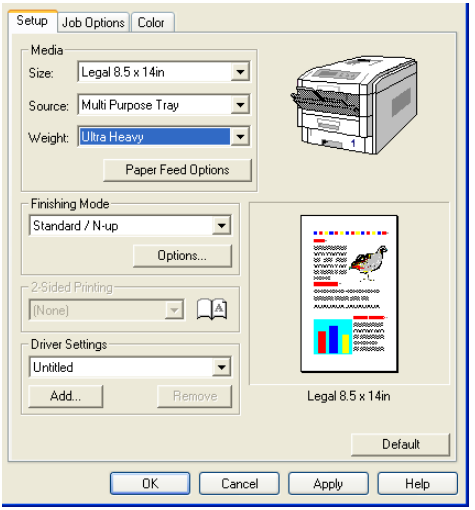
4. Select the required paper feed under **Source**.



NOTE

If a paper tray is selected, the Weight field becomes visible.

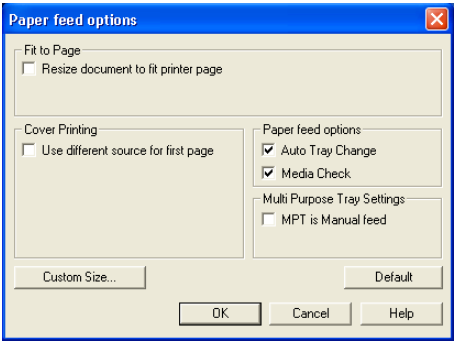
5. Select the required paper type under **Weight**.



NOTE

If Printer Setting is selected, make sure the printer has been set to the correct media type.

6. Click the **Paper Feed Options** button and make any other selections. Click **OK**.



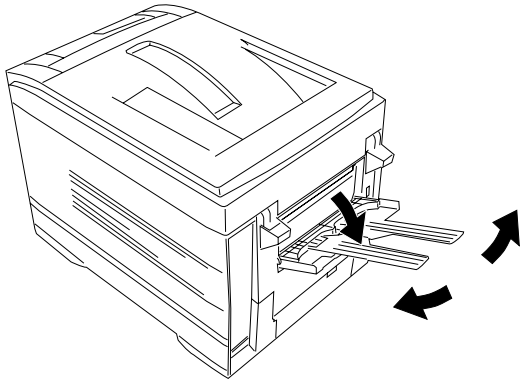
7. Click **OK** twice. Close the Printers and Faxes dialog box.

Important!

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



Network Printer Status Utility

- Available on TCP/IP network connection only.

The Network Printer Status utility is available if your administrator has installed it.

If the utility is installed, the printer driver **Properties** dialog box changes.

- a new **Status** tab is added.
- an **Option** button is added to the **Device Option** tab.

This utility allows you to view (but not change) the status of the following on the **Status** tab:

- paper trays installed and the media assigned to them.
- total size and percentage used of disk/memory.
- percentage of toner remaining.

Important!

If you select **Automatic Status Update** in the **Status** tab, the driver automatically pings the printer for the latest status information every time you open the **Properties** dialog box.

This causes a significant delay until the Properties dialog box opens.

To avoid this, use the **Update Status** button in the **Status** tab to manually update the information on demand.

Windows XP Operation

NOTE

Most applications allow the printer properties to be accessed from within the document print dialog box.

This section explains how to set up color printing and how to use the printer's features.

Printer's features covered in this section include:

- N-up printing (see page 153)
- Custom page sizes (see page 156)
- Selecting print resolution (see page 164)
- Duplex printing (see page 165)
- Printing Booklets (see page 169)
- Watermarks (see page 174)
- Collating (see page 176)
- Proof and Print (see page 177)
- Secure print: printing confidential documents (see page 181)
- Storing files to the hard disk drive (see page 185)
- Using overlays (see page 189)
- Printing posters (see page 202)

Factors that Affect Color Printing

The PCL and PostScript printer drivers supplied with your printer provide several controls for changing the color output. For general use the default driver settings produce good results for most documents.

Many applications have their own color settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's color management functions.

If you wish to manually adjust the color settings in your printer driver, please be aware that *color reproduction is a complex topic, and there are many factors to take into consideration*.

Some of the most important factors are

- the differences between the range of colors a monitor can reproduce versus the range of colors that a printer can reproduce
- viewing conditions
- printer driver color settings
- monitor settings
- how your software application displays color
- paper type

Factors that Affect Color Printing

Monitor Colors vs. Printer Colors

(Differences between the range of colors a monitor or printer can reproduce)

- Neither a printer nor a monitor is capable of reproducing the full range of colors visible to the human eye. Each device is restricted to a certain range of colors. In addition to this, a printer cannot reproduce all of the colors displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent color. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Yellow, Magenta and Black (CMYK) toner or ink.
- A monitor can display very vivid colors such as intense reds and blues. These cannot be easily produced on any printer using toner or ink. Similarly, there are certain colors, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colors do not match the colors displayed on screen.

Viewing Conditions

A document can look very different under various lighting conditions. For example, the colors may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

Printer Driver Color Settings

The driver settings for Manual color can change the appearance of a document. There are several options available to help match the printed colors with those displayed on screen. These options are explained in subsequent sections of this User Manual.

Factors that Affect Color Printing

Monitor Settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor color temperature influences how "warm" or "cool" the colors look.

NOTE

Several of the Color Matching options make reference to your monitor's Color Temperature. Many monitors allow you to adjust the color temperature through their control panels.

There are several settings found on a typical monitor:

- **5000k***

  Warmest; yellowish lighting, typically used in graphics arts environments.

- **6500k***

  Cooler; approximates daylight conditions.

- **9300k***

  Cool; the default setting for many monitors and television sets.

*k = degrees Kelvin, a measurement of temperature

Factors that Affect Color Printing

How your Software Application Displays Color

Some graphics applications such as CorelDRAW® or Adobe® Photoshop® may display color differently from "office" applications such as Microsoft® Word. Please see your application's online help or user manual for more information.

Paper Type

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

Color Matching

Choosing a Method

NOTE

These suggestions are for guidance only. Your results may vary depending on the application from which you are printing. Some applications override, without warning, any color matching settings in the printer driver.

There is no one way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible color.

However, the following guidelines may help in achieving good color output from your printer.

There are several suggested methods, depending on the type of document you are printing.

- most common [RGB] (see page 135)
- professional desktop publishing and graphics [CMYK] (see page 135)
- photographic images (see page 136)
- specific colors (i.e., a company logo) (see page 137)
- printing vivid colors (see page 138)

Color Matching

Choosing a Method

RGB or CMYK?

The guidelines for choosing a color matching method make distinctions between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Black (CMYK).

Generally, most documents you print are in RGB format. This is the most common, and, if you do not know your document's color mode, assume that it is RGB.

Typically, CMYK documents are only supported in professional Desktop Publishing and Graphics applications.

Color Matching

Choosing a Method

Matching Photographs

RGB only

Oki Color Matching (see page 145) is a generally a good choice. Select a matching method appropriate to your monitor.

RGB or CMYK

If you are printing photographic images from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC-Profiles provided (see “Windows ICM Color Matching” on page 152). Print using the ICC profiles as the Print Space (or Output space).

Color Matching

Choosing a Method

Matching Specific Colors
(Example: Company logo)

RGB only

- Oki Color Matching (see page 145), and the sRGB setting: PCL or PS driver.
- PostScript Color Matching using the Absolute Colorimetric option (see page 147).
- Use the Color Swatch Utility to print out a chart of RGB swatches and enter your desired RGB values in your application's color picker—PS only (see page 142).

RGB or CMYK

- If you are printing from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC profiles provided (see “Windows ICM Color Matching” on page 152). Print, using the ICC profiles as the Print Space (or Output space) (PS only).
- Alternatively, use PostScript Color Matching with the Absolute Colorimetric Setting (see page 147).

Color Matching

Choosing a Method

Printing Vivid Colors

RGB only

Use Oki Color Matching (see page 145), with the Monitor 6500k Vivid, sRGB or Digital Camera settings (PCL or PS).

RGB or CMYK

Use PostScript Color Matching (see page 147) with the Saturation option.

Color Matching

Color Matching Options

PCL Driver

The Color Matching Options in the PCL driver can be used to help match your printed colors to the ones displayed on your monitor.

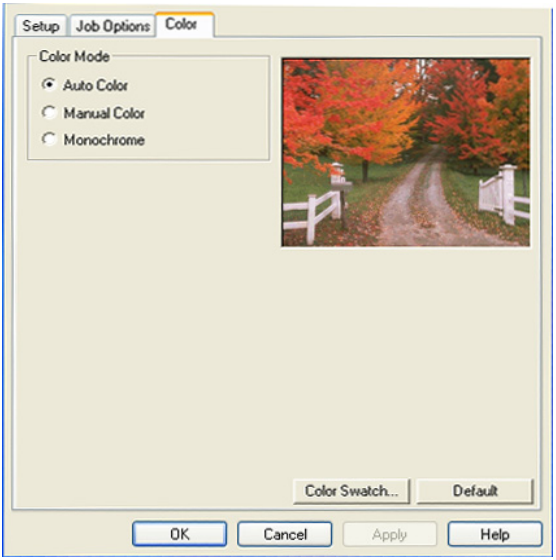
NOTE

The PCL driver's color options are only designed to work with RGB data.

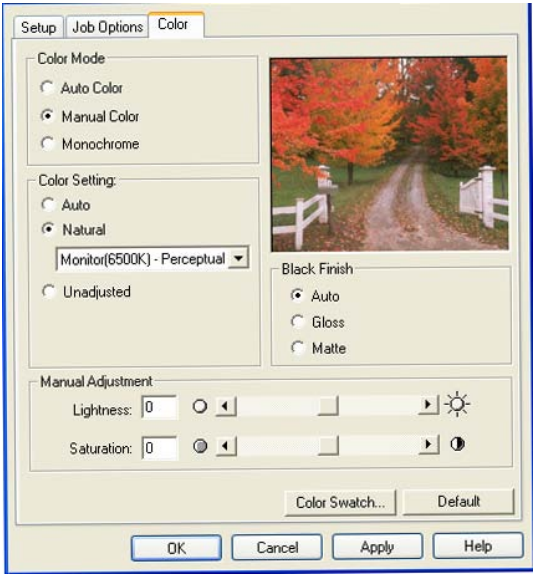
If you are printing CMYK data, we recommend you use the PostScript driver.

Manually set the options in the PCL driver:

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Right click the appropriate printer name. Click **Printing Preferences**.
3. Click the **Color** tab.



4. Under **Color Mode,** click **Manual Color**.
5. Under **Color Setting**, click **Natural**.



6. Select the method you wish to use:

   Monitor (6500k) Perceptual

   Optimized for printing photographs when using a monitor with a color temperature of 6500K.

   Monitor (6500k) Vivid

   Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics.

   Monitor (9300k)

   Optimized for printing photographs when using a monitor with a color temperature of 9300K.

   Digital Camera

   Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

   sRGB

   Optimized for matching specific colors, such as a company logo color. The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.
7. Set any other required parameters. Use the on-line Help for guidance.
8. When you are done, click **OK**. Close the Printing Preferences dialog box.

Color Matching

Color Matching Options

Print Color Swatch Utility

For use with applications which allow you to set your own RGB values for colors.

The Color Swatch utility prints out charts of sample colors. Listed below each color are the corresponding RGB (Red, Green, Blue) values to use in your application to match that printed color.

An example of using the Print Color Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.
4. Click the **Color Swatch** button to print the color swatch samples.
5. Select the shade of red that best suits your needs and make a note of the RGB value below that particular shade.
6. Use your program's color picker to enter the same RGB values (from step 5). Change the logo to that color.

NOTE

The RGB color displayed on your monitor may not necessarily match what was printed on the color swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce color.

Color Matching

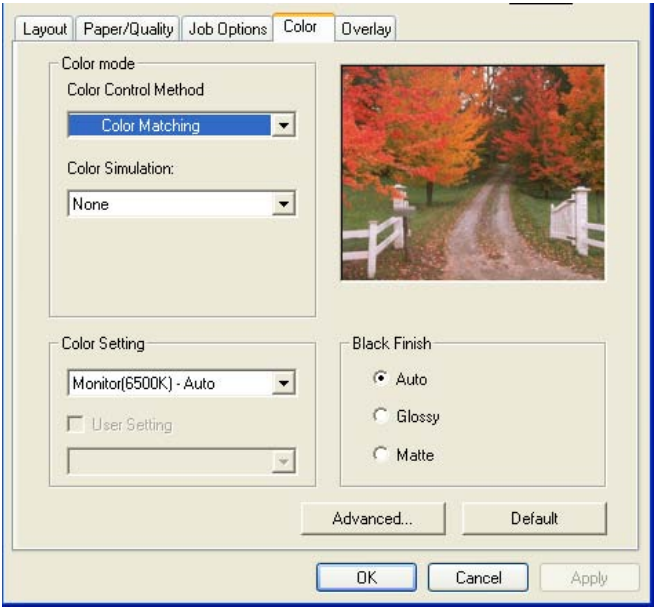
Color Matching Options

PostScript Driver

The PostScript driver offers several different methods of controlling the color output of the printer.

Setting Options Manually

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.



4. Under **Color Mode**, use the drop-down list to select one of the following **Color Control Method**s:

   a. OKI Color Matching

   This is OKI's proprietary color matching system, and affects *RGB data only*. See "OKI Color Matching" on page 145.

   b. PostScript Color Matching

   This uses PostScript Color Rendering Dictionaries built into the printer, and affects both RGB and CMYK data. See "PostScript Color Matching" on page 147.

   c. Using ICC Profiles

   This option provides a method of matching RGB colors similar to Windows ICM matching. See "Using ICC Profiles" on page 149.

   d. No Color Matching

   Use this option to switch off all printer color matching. No color correction occurs when selected. This option is beneficial when other matching regimens are used, specifically if you select a Color Simulation option.

   e. Print in Grayscale

   This option prints all documents as monochrome. No color prints. The printer interprets all colors as a variation of grays.

Color Matching

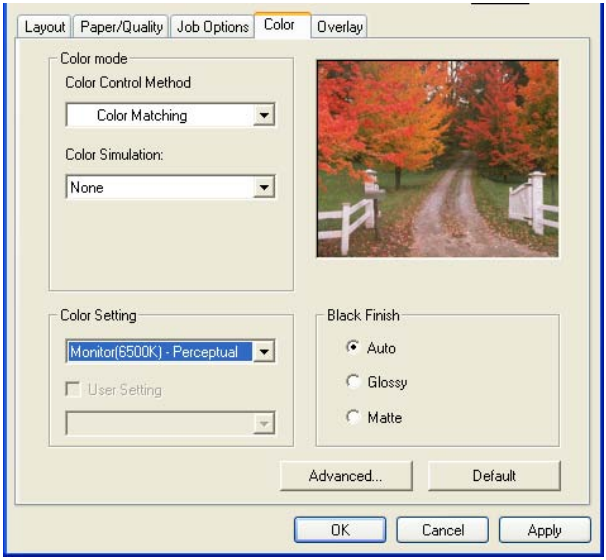
Color Control Method

OKI Color Matching

PostScript

This is OKI's proprietary color matching system. It affects *RGB data only*. This is the default setting. It provides the fastest, best color matching for your printer.

Under **Color Setting,** use the drop-down list to select the type to be used:



Color Matching

Color Control Method

OKI Color Matching

PostScript

Color Settings

Monitor (6500k) Auto

Optimized for printing general documents when using a monitor with a color temperature of 6500K.

Monitor (6500k) Perceptual

Optimized for printing photographs when using a monitor with a color temperature of 6500K. This is best for printing photographic images.

Monitor (6500k) Vivid

Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics and text. Vivid or Digital Camera settings produce brightest colors.

Monitor (9300k)

Optimized for printing photographs when using a monitor with a color temperature of 9300K.

Digital Camera

Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken. Vivid or Digital Camera settings produce brightest colors.

sRGB

Optimized for matching specific colors, such as a company logo color. This option attempts to simulate RGB color.

The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.

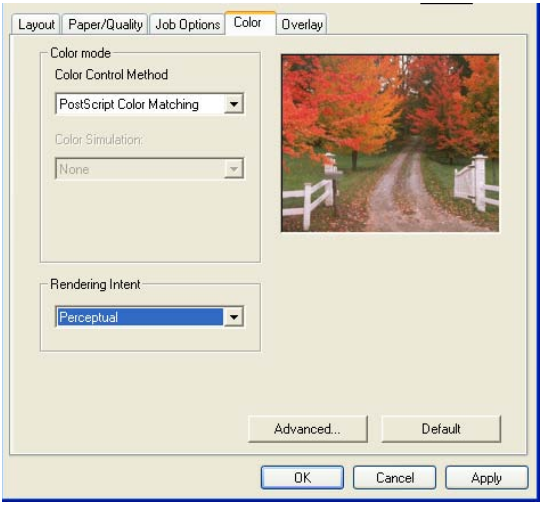
Color Matching

Color Control Method

PostScript Color Matching

This uses PostScript Color Rendering Dictionaries built into the printer. It affects both RGB and CMYK data.

From the **Rendering Intent** drop-down list, select the rendering type.



Color Matching

Color Control Method

PostScript Color Matching

Rendering Intents

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

The printer driver provides the rendering intents listed below:

- *Auto*
  Best choice for printing general documents.
- *Perceptual*
  Best choice for printing photographs. Compresses the source gamut into the printer's gamut while maintaining the overall appearance of an image. This option attempts to simulate RGB color.
- *Saturation*
  Best choice for printing bright and saturated colors if you don't necessarily care how accurate the colors are. This makes it the recommended choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.
- *Relative Colorimetric*
  Good for proofing CMYK color images on a desktop printer. Much like Absolute Colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute Colorimetric, Relative Colorimetric attempts to take the paper white into account.
- *Absolute Colorimetric*
  Best for printing solid colors and tints (such as Company logos). Matches colors common to both devices exactly. Clips the out of gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

Color Matching

Color Control Method

Using ICC Profiles

PostScript Only

- Affects **RGB data only**.

This provides a method of matching RGB colors similar to Windows ICM matching. The main advantage it has over Windows ICM color matching is that it provides a method of printing using both input and output profiles. Windows ICM matching only allows output profiles to be chosen.

Input Profiles (e.g., a digital camera) provide information about the color in the original device that was used to capture or display the image data. For example, an input device could be a scanner, digital camera, or monitor.

Output Profiles (e.g., the printer) provide information about the device to which you are printing.

The Using ICC Profiles feature uses both the input and output profiles to generate a CRD (Color Rendering Dictionary), which is used to match the colors as closely as possible.

NOTE

This feature may not work for all application programs. However, many professional graphics applications offer a similar feature in their print settings, with the ability to choose a source (input) color space, and a print (output) color space.

Color Matching

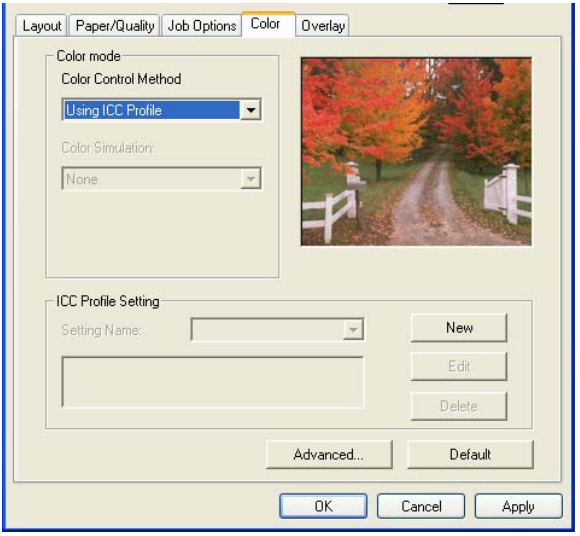
Color Control Method

Using ICC Profiles

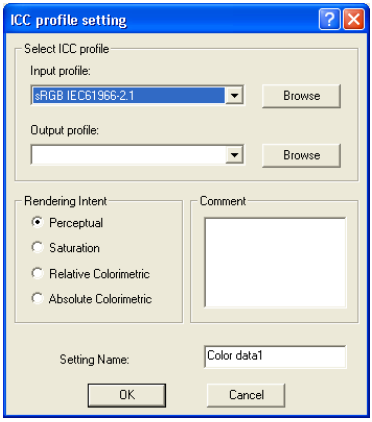
PostScript Only

Setting Up

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.
4. Under **Color mode**, in the **Color Control Method** drop-down list, select **Using ICC Profile**.



5. Click the **New** button.



6. Under **Select ICC profile**, use the drop-down lists to select the **Input profile** and **Output profile**.
7. Select the desired **Rendering Intent** (see “Rendering Intents” on page 148). Type in a name for the profile. Click **OK**.
   The new name appears in the **Setting Name** drop-down list under **ICC Profile Setting**.
8. Repeat steps 5-7 for each ICC profile you wish to define.
9. Click **OK**. Close the Printers and Faxes dialog box.

Color Matching

Color Control Method

Windows ICM Color Matching

PCL or PostScript

- ICM is the color management system built into Windows.
- Affects **RGB data only**.
- Can be associated with either the PCL or PS driver

Windows ICM uses ICC profiles for your monitor and printer. These profiles describe the colors that your device is capable of reproducing. ICC profiles can be associated with your printer via the **Color Management** tab of the printer driver.

Depending on how you have installed the printer driver, the color profiles may already be associated with the driver.

To associate ICC Color Profiles with the printer driver:

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Highlight the printer name. Click **File**, then **Properties**.
3. Click the **Color Management** tab.
4. Under "**Color Profiles currently associated with this printer**", you should see the names of profiles that match your printer model. If you do not see any profiles associated with the driver, click "**Add...**" and locate the ICC profiles for your printer.

Windows ICM uses the information in these profiles to convert colors in your documents to colors that the printer can reproduce. The way in which this conversion is performed can be controlled via the ICM Intent control in the printer driver.

NOTE

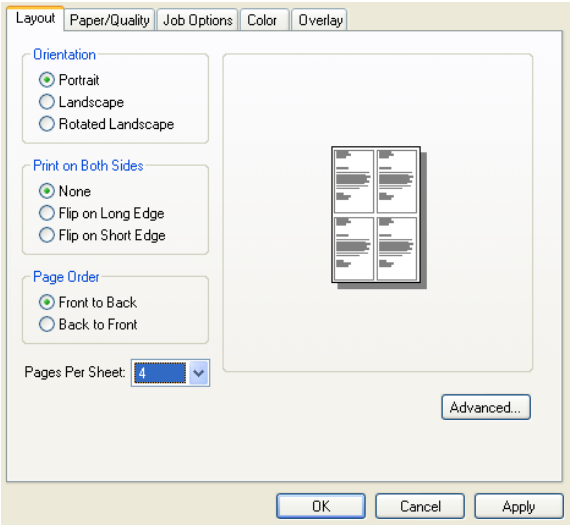
The Color Match "Using ICC Profiles" feature provides an alternative to Windows ICM. It is similar to Windows ICM, but offers several additional features.

Printing Multiple Pages on One Sheet

(N-Up Printing)

PostScript

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Preferences** button.
3. On the **Layout** tab, under **Pages Per Sheet**, select the required number of pages.
4. Click **OK**. Click **Print**.

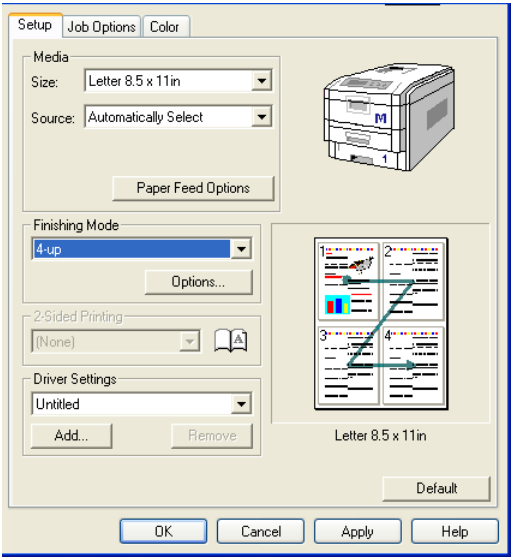


Printing Multiple Pages on One Sheet

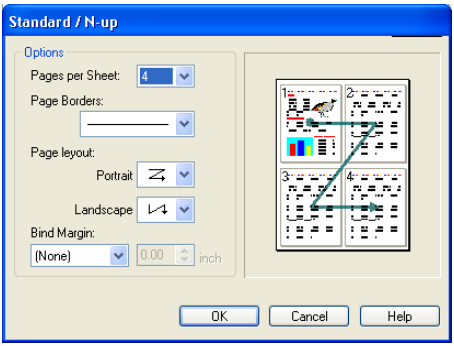
(N-Up Printing)

PCL

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Setup** tab, under **Finishing Mode**, select the required number of pages per sheet.



4. Click the **Options** button. Select the **Page Borders**, **Page Layout** and **Bind Margin**. Click **OK**.
5. Click **OK**. Click **Print**.



Custom Page Sizes

PostScript

NOTE

One custom paper size can be defined in the PostScript driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

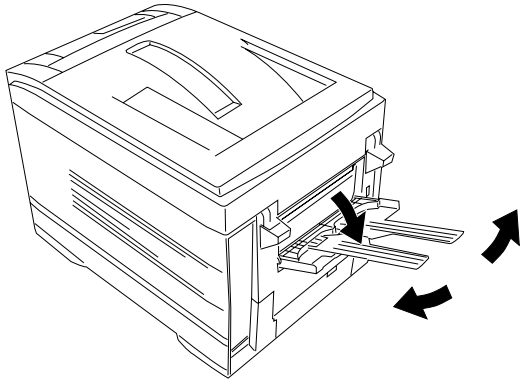
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Preferences** button.

Important!

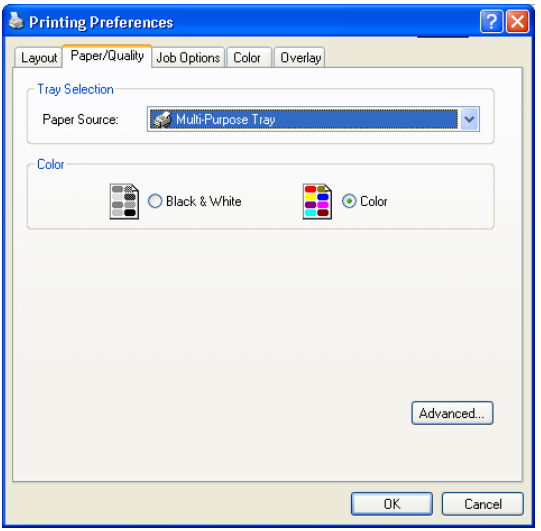
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

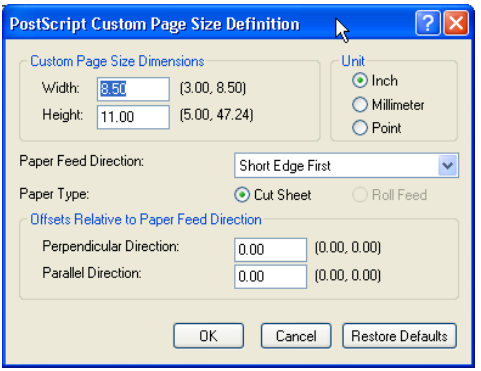
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



3. Click the **Paper/Quality** tab. Under **Tray Selection**, in the **Paper Source** drop-down list, select **Multi Purpose Tray**.



4. Click the **Advanced** button. Under **Paper/Output**, in the **Paper Size** drop-down list, select **Postscript Custom Page Size**.



5. Enter the **Width** and **Height** for the custom paper.
   Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]
6. Select the **Paper Feed Direction**.

NOTE

- **Long Edge First = media feeds in long edge first**
- **Short Edge First = media feeds in short edge first**
- **Long Edge First (flipped) = Reserved for future use.**
- **Short Edge First (flipped) = Reserved for future use.**

7. Click **OK** three times.
8. Click **Print**.

Custom Page Sizes

PCL

NOTE

Up to 32 custom page sizes can be defined in the PCL driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

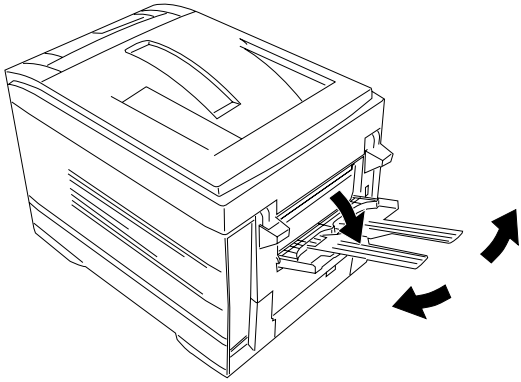
- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

Important!

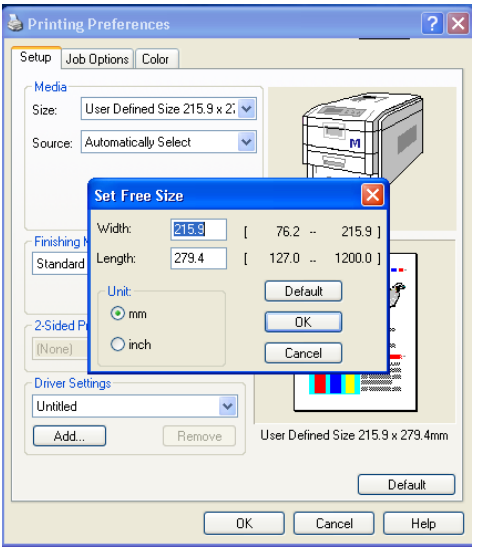
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Setup** tab, under **Media**, in the **Size** drop-down list, select **User Defined Size**.

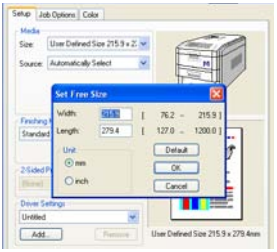


NOTE

You may see a Warning dialog box indicating a conflict. If you do, click OK.

The driver automatically makes the needed changes to correct for the conflict.

4. Select the unit. Enter the width and length measurements. Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]



5. Click **OK**.
6. Check that **User Defined** now appears in the **Size** list on the **Setup** tab.

NOTE

To save the setting for future use:

- **Click Paper Feed Options.**
- **Click Custom Size.**
- **Select the unit.**
- **Enter the relevant information for Width and Height.**
- **Give your custom size a name under Name.**
- **Click Add.**
- **Click OK.**

The Custom Page Size is added to the bottom of the Paper Size list.

7. Click **OK**.
8. Click **Print**.

Print Resolution

PCL or PostScript

Changing for a Print Job

NOTE

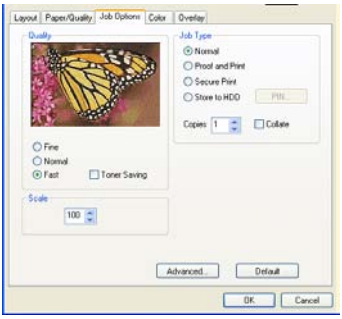
To change the settings to apply to all jobs (default settings):

- **Click Start → Settings → Printers and Faxes.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

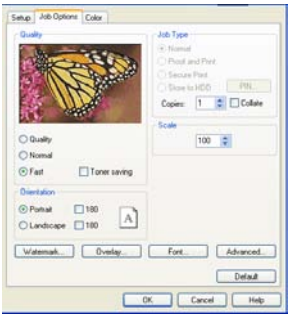
More tabs appear in the Properties screen for setting defaults.

1. Open the file in your application. Select **File → Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Preferences** button.
3. Click the **Job Options** tab.
4. Select the required printing resolution under **Quality**.

PostScript Driver



PCL Driver



5. Select **Toner Saving** (if appropriate).
6. Click **OK**. Click **Print**.

Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Usage Restrictions

NOTE

Before you can perform duplex printing, unit must be

- **installed in the printer**

and

- **enabled in the driver.**

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.
- Duplexing cannot be used if Paper Weight is set to Ultra Heavy.

See Paper (Media), “Weight and Type” on page 58.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers and Faxes.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

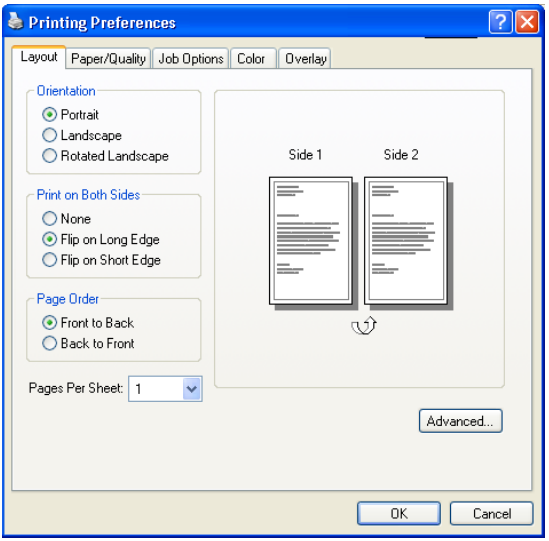
Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Preferences** button.
3. On the **Layout** tab, under **Print on Both Sides**, select **Flip on Long Edge** or **Flip on Short Edge**.
4. Click **OK**. Click **Print**.



Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Usage Restrictions

NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers and Faxes.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

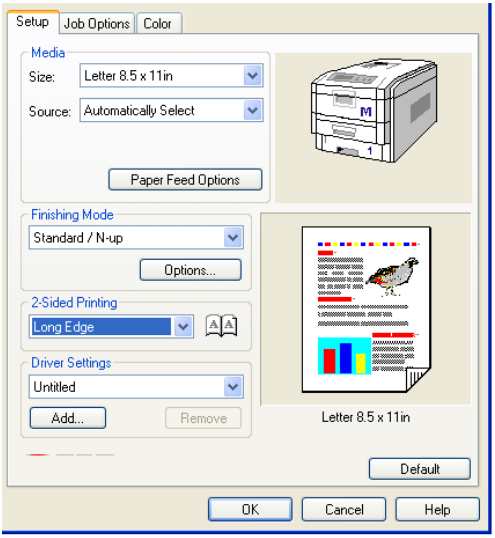
Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Setup** tab, under **2-Sided Printing**, select **Long Edge** or **Short Edge**.
4. Click **OK**. Click **Print**.



Printing Booklets

PostScript

NOTES

- **You must have the duplex unit installed and enabled in order to print booklets.**
- **Not available on some network connections. See the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

Important!

Booklet printing with the PostScript driver is restricted to two (2) pages per sheet

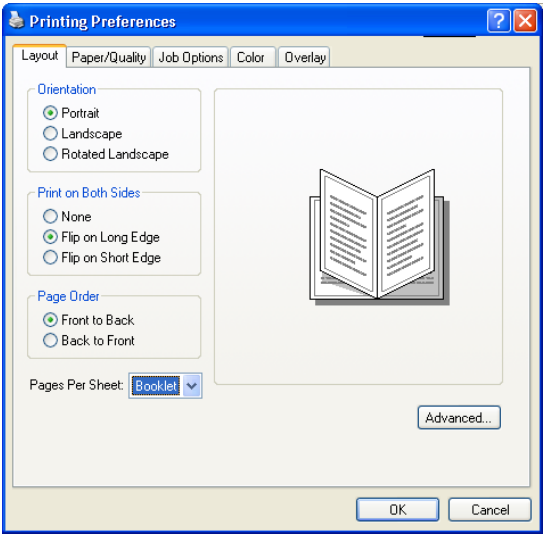
Examples:

- print a 5½ x 8½ inch booklet on 8½ x 11 inch paper
- print an 8½ x 11 inch booklet on 11 x 17 inch paper

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Preferences** button.

3. On the **Layout** tab, under **Pages Per Sheet**, select **Booklet** in the drop-down list.

4. Click **OK.** Click **Print**.



Printing Booklets

PCL

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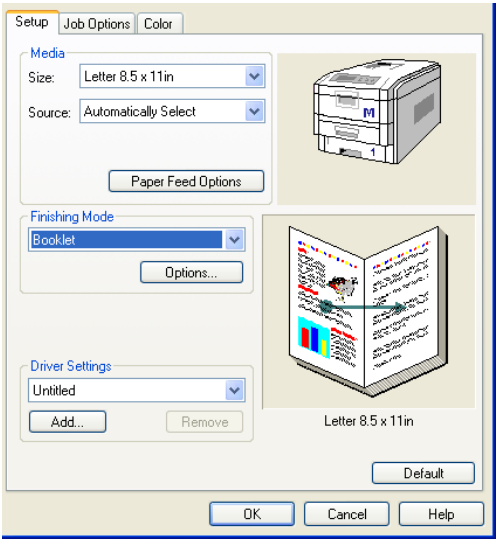
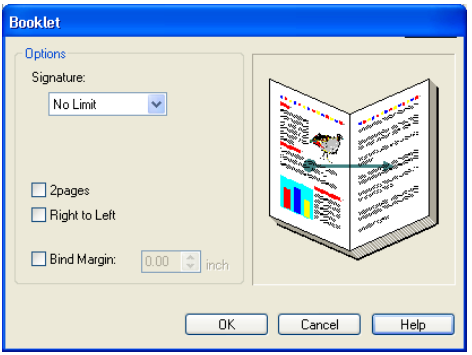
- **You must have the duplex unit installed and enabled in order to print booklets.**
- **Not available on some network connections: see the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Setup** tab, under **Finishing Mode**, in the drop-down list, select **Booklet**.



4. Click the **Options** button. Set the **Signature**, **2pages**, **Right to Left**, and **Bind Margin**, as required. See the online Help for information. Click **OK**.

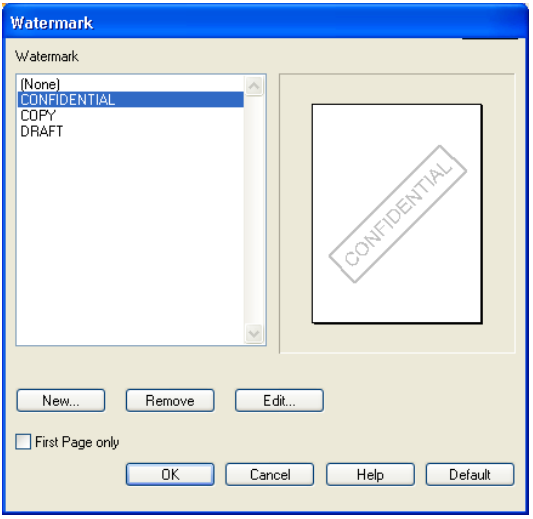
5. Click **OK.** Click **Print**.



Printing Watermarks

PCL Only

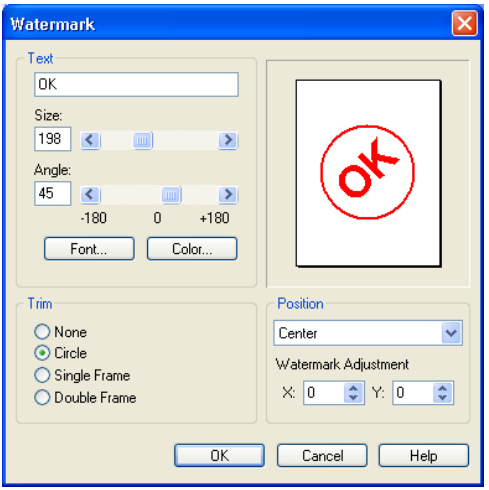
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Job Options** tab, click **Watermark**.
4. Select a name from the **Watermark** list.



NOTE

To create a new watermark or edit an existing watermark:

- **Click the New or Edit button.**



- **Enter the text for the watermark. Select the attributes (font, size, angle) to be used.**
- **Click OK.**

The new watermark appears in the Watermark list.

5. If you wish to print the watermark only on the first page of the document, select **First Page only**.
6. Click **OK** twice.
7. Click **Print**.

Collating

PCL or PostScript

Collating can be carried out with or without a hard disk drive installed. A printer with a hard disk drive performs better.

Important

If your software application has a collate option, use it instead of the collate option in the printer driver.

To use the printer driver to select collating:

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Preferences** button.
3. On the **Job Options** tab, under **Job Type**, enter the number of copies required. *Only if the application has no collate option*—select **Collate**.
4. Click **OK**. Click **Print**.

PostScript Driver

PCL Driver

Proof and Print

PCL or PostScript

Using

Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

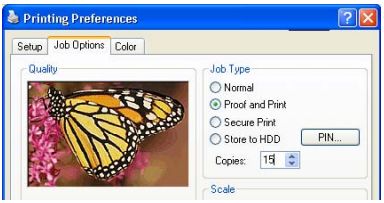
NOTES

- **The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy is printed.**
- **If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.**
- **Proof and print may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Preferences** button.
3. Enter the number of copies. If required, select **Collate**.

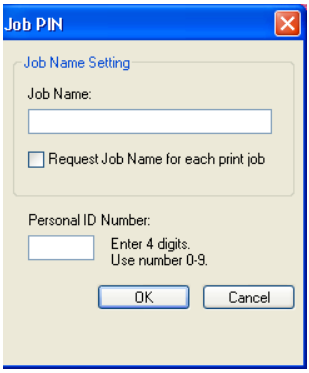
PostScript Driver

PCL Driver



a. Under **Job Type**, select **Proof and Print**.

b. Enter a job name of up to 16 characters under **Job Name Setting**. If required, select **Request Job Name for each print job**.



c. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

4. Click **OK**. Click **Print**. The document is stored on the hard disk drive. One copy is printed for checking.

5. After checking the proof, print or delete (if incorrect) the remaining copies of the document. Use the procedures given below.

Proof and Print

Printing Copies

1. Press the MENU button to access the **PRINT JOBS MENU**. Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the remaining copies of the document.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Proof and Print

Deleting Copies

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Secure Printing

(Printing Confidential Documents)

PCL or PostScript

Using Secure Printing

Secure printing (printing with passwords) allows you to print confidential documents on printers that are shared with other users in a network environment.

NOTE

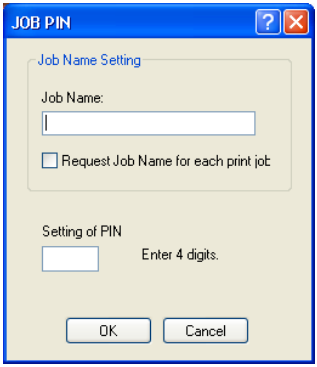
- **The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.**
- **Secure printing may not be available in some software applications.**

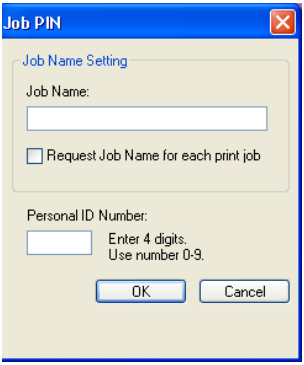
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Preferences** button.
3. Under **Job Type**, select **Secure Print**.

NOTE

If you've already used Secure Print to place a document on the hard disk drive, but have not yet printed it out, click the PIN button and enter a new job name.

a. Enter a job name of up to 16 characters under **Job Name.** If required, select **Request Job Name for each print job**.





b. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

4. Enter the number of copies. If required, select **Collate**.

PostScript Driver

PCL Driver

5. Click **OK**. Click **Print**. The document is stored on the printer's hard disk.

6. Go to the printer. Use the front panel to print the document. See below.

Secure Printing

(Printing Confidential Documents)

Printing at the Printer

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button.
   The document prints and is deleted from the hard disk drive.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Secure Printing

(Printing Confidential Documents)

Deleting the confidential document before printing it

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the job from the printer.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

PCL or PostScript

Storing a Document

Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead, stationery, etc.

NOTE

- **The internal hard disk must be installed in the printer and enabled.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.**
- **Store to Hard Disk may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Preferences** button.

3. On the **Job Options** tab, select **Store to HDD**.

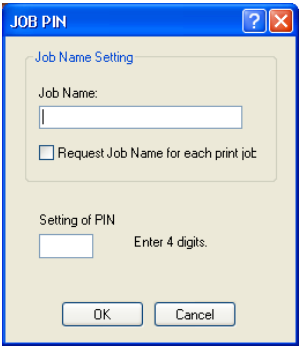
PostScript Driver

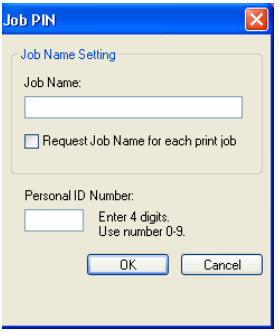
PCL Driver

NOTE

If you've already stored a document on the printer's hard disk drive, and want to store another one, click the PIN button and enter a new Job Name.

a. Enter a job name of up to 16 characters under **Job Name Setting.** If required, select **Request Job Name for each print job**.





b. Type a four digit personal ID number from 0000 to 7777. Click **OK**.

4. Select the number of copies. Click **Collate**, if applicable.

5. Click **OK**. Click **Print**. The document is stored on the hard disk. It can then be printed on demand, or deleted. Use the procedures given below.

Hard Disk Drive

Printing a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the document.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

Deleting a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Overlays

What are Overlays?

An overlay can be a combination of graphics, fonts, or text that is stored in the printer's flash memory or on the hard disk (supplied on some models, optional on others), and printed whenever required. The result is similar to the Watermark feature, but with the ability to be much more elaborate.

Overlays can be useful for tasks such as printing letterheads, forms, or invoices, and should reduce the need for pre-printed stationery.

Example of Using Overlays

Suppose that you used the Storage Device Manager to create and store three files in the printer:

- the company logo
- the company address
- the company mission statement.

The Overlay feature allows these files to be incorporated into your document in various combinations, depending on your requirements.

Creating Overlays

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead).
2. Use the printer driver to generate a PRN file (print file).
3. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format.
4. Download the storable file to the printer.

Once someone has set up all the necessary overlay files on the printer, other users only have to switch on the required settings in the printer driver to use the overlays.

NOTE

- **The internal hard disk must be installed in the printer to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for overlay to operate correctly.**
- **An overlay may consist of more than one component file.**

Creating documents to use as overlays

PCL

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

To create a print (PRN) file:

1. Open your application program. Open the file to be stored as an overlay. Choose **File,** then **Print**.
2. Make sure that the "**Print To File**" option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model. Click the **Preferences** button. This should open the printer driver settings.

Important

You must use the Oki PCL driver to do this.

4. Choose all of the printer driver settings with which you would like your overlay to print.
5. Try to keep the overlay to a single sheet. Don't use N-up, duplex, finisher options, etc. when creating an overlay. These can be added when printing the document that includes the overlay.
6. Click **OK** to close the Printing Preferences dialog box.
7. Click **Print**.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as "my template.prn."

Creating documents to use as overlays

PostScript

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

1. Open your application program. Open the file to be stored as an overlay. Choose **File,** then **Print**.
2. Make sure that the **Print To File** option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model. Then click **Properties...** This should open the printer driver settings.
4. Select the **Job Options** tab. Click the **Overlays...** button.
5. Choose **Create Form** from the menu.
6. Click **OK** to close the Properties dialog box.
7. Click **OK** to print the document to a file.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as “my template.prn.”

Important

You must use the Oki PostScript driver to do this.

Downloading the print file to use as an overlay

In the previous topic, you created a print (PRN) file on your PC's hard disk. This topic explains how to use the Storage Device Manager to download this file to the printer.

The Storage Device Manager software is included with the original software CDs that were supplied with your printer.

1. Launch Storage Device Manager. Allow the program to discover (locate) the printer.
2. Click **Project**, then **New Project**.
3. From the **Project** menu, select **Add File to Project**.
4. Select the PRN file(s) that you created earlier.
   PCL: This automatically generates a BIN file.
   PostScript: This automatically generates a PostScript hst file.

Important!

The BIN file is automatically assigned an ID number.

To change the ID number

- double-click the number
- enter a new one in the ID field.

5. Note the name that the file is assigned in the Storage Device Manager. *Names are case sensitive*.

NOTE

The assigned file name is very important! You must use this ID number or name when creating overlays in the printer driver. You should change the ID number or name from the default value. *Note the new name for later use*.

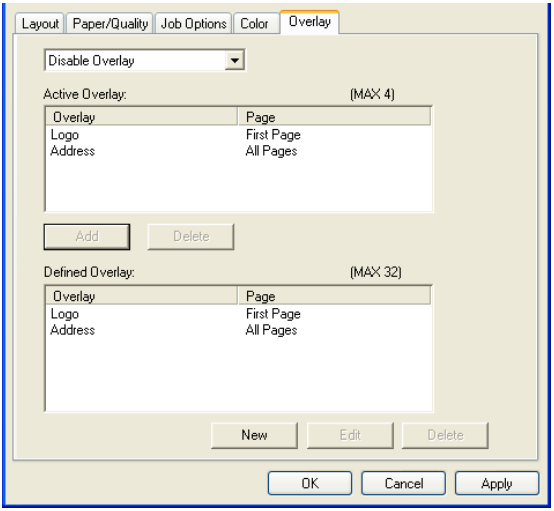
6. Make sure the printer being used is highlighted in the lower window of the Storage Device Manager.

7. Select the **Project** menu. Choose **Send Project Files to Printer**.
   This downloads the file to the printer.
   If the file was downloaded successfully, "Command Issued" displays.
8. Close the Storage Device Manager.

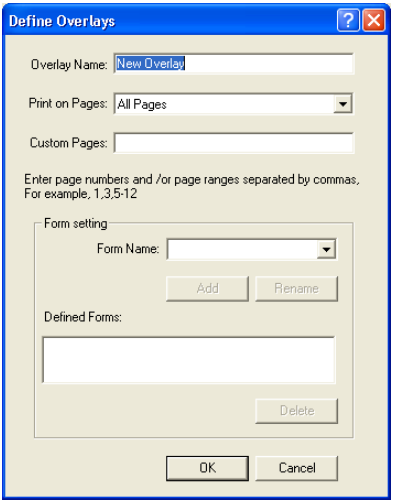
Defining Overlays

PostScript

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. RIght click the printer name. Click **Printing Preferences**.
3. Click the **Overlay** tab.
4. Click the **Overlay** button.



5. Click the **New** button.

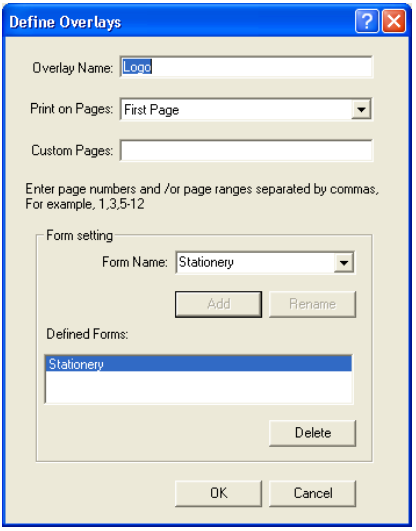


6. In the **Overlay Name** list, enter the file name of the overlay. Select the pages where you want the overlay to print.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printers' hard disk drive. It is case sensitive.

7. Under **Form setting**, in the drop-down list, enter or select a form name. Click **Add.**

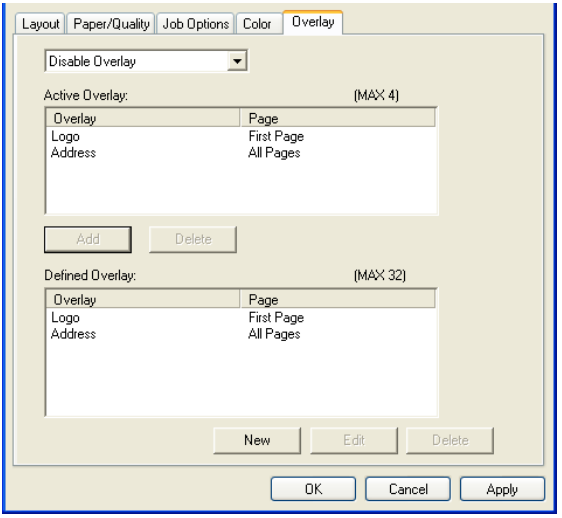


NOTE

The Form Name is a random name of your selection.

8. Click **OK**.
9. To continue to add files to the overlay (if required), repeat steps 5 through 8.

10. Under **Defined Overlay**, highlight the overlay name(s). Click **Add** to add the overlay(s) to the list under Active Overlay. To select more than one overlay, hold the CTRL key while clicking on each name.



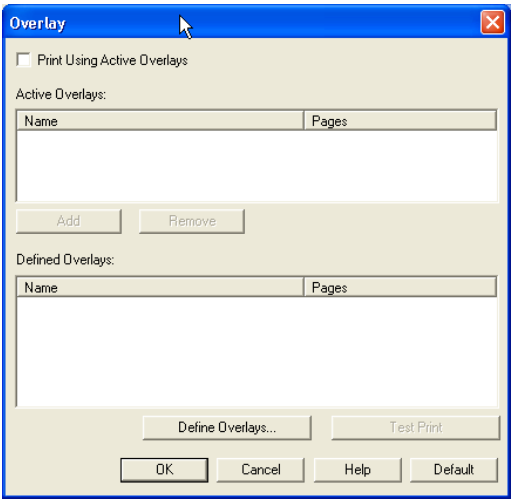
11. At the top of the dialog box, use the drop-down list to select **Use Overlay**. Click **OK**.

12. Close the Printers and Faxes dialog box.

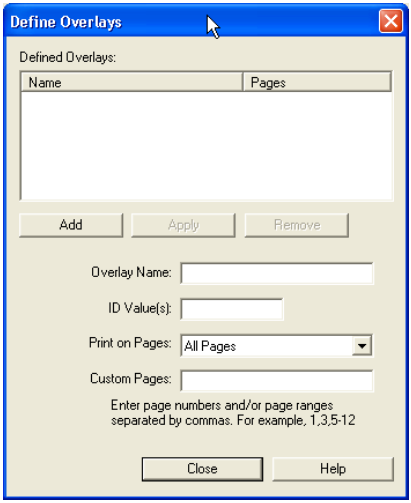
Defining Overlays

PCL

1. Click **Start** → **Settings** → **Printers and Faxes.**
2. Highlight the printer name. Click **Printing Preferences**.
3. Click the **Job Options** tab.
4. Click the **Overlay...** button.



5. To define an overlay, click the **Define Overlays** button.



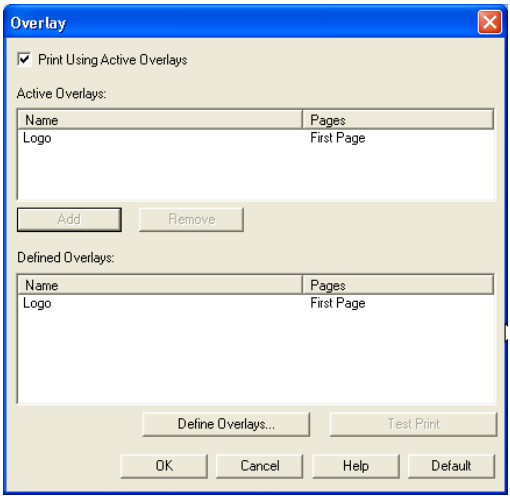
6. In the **Overlay Name** list, enter the file name of the overlay

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printer's hard disk drive. It is *case sensitive*.

7. In **ID Values, e**nter the ID of the file. Please refer to the instructions for the Storage Device Manager utility.
8. Select which pages the overlay is to be printed on from **Print on Pages** or use **Custom Pages** to select specific page numbers in the document. Click **Add**.
9. Click **Close**.
10. Under **Defined Overlay**, highlight the overlay name. Click the **Add** button to add the overlay to the list in **Active Overlays**.

11. Select **Print Using Active Overlays**.



12. Click **OK**.

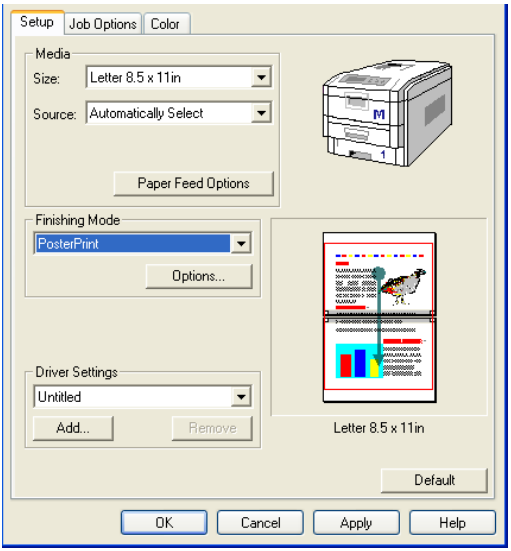
13. Click **OK** to close the Printing Preferences dialog box.

Printing Posters

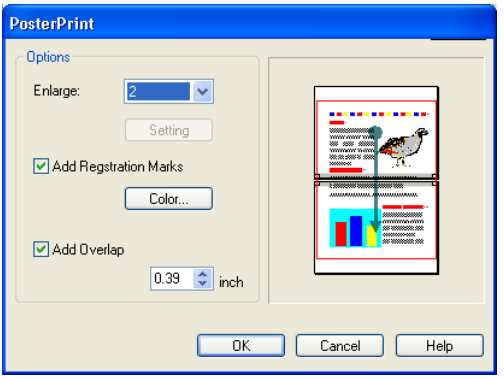
PCL Only

This option allows you to configure and print posters by breaking up the document page into multiple pieces. Each piece prints, enlarged, on a separate sheet. Then, the separate sheets are combined to produce a poster. It is only available with the PCL printer driver.

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Preferences** button.
3. On the **Setup** tab, under **Finishing Mode**, select **Poster Print**.



4. Click **Options...** and enter the configuration details.



5. Click **OK** twice.
6. Click **Print**.

Windows 2000 Printer Drivers

See your printed *Software Installation Guide* for information on installing printer drivers.

You can also go to **http://my.okidata.com** to view and/or download a copy of the *Software Installation Guide* or for the latest information on drivers for your printer.

Which Printer Driver to Use?

Your printer comes with Windows drivers for PCL and Adobe® PostScript® (PS). You can install either of these, or both if you wish. Which driver you choose depends on your application.

- If you use TrueType fonts and you do not print PostScript (including ".eps" files) graphics, choose the PCL driver.

  This is more efficient and gives good results.
- If you use PostScript fonts or print PostScript graphics, choose the PostScript driver. In this situation, performance is faster and graphics print at their best quality.

NOTE

The line art graphics in this manual are PostScript. If you plan to print parts of this manual, choose the PostScript driver. Otherwise, the line art graphics print at low resolution. The print quality may not be satisfactory.

If neither driver seems to cover all your needs, you should install both drivers. Select the same printer port (LPT1 or Network Port) for both drivers during the installation.

Set the driver you plan to use most of the time to be your Windows default driver. Most applications allow you to choose a different printer from within the print dialog, so you can use the alternative driver for printing whenever you need to.

Memory: Enabling

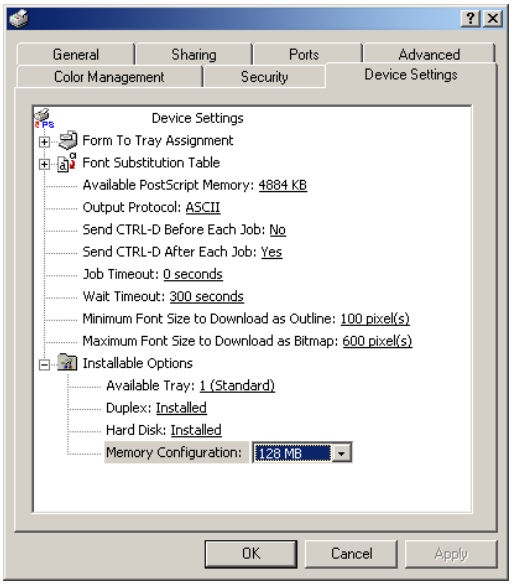
PostScript Only

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

If you have additional memory in your printer, use these instructions to update the Windows PostScript driver so that it recognizes the additional memory:

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, click **Memory Configuration**, then set the memory in the drop-down list to be the same as that now installed in the printer, as shown in the Menu Map.
   To print the Menu Map, see “Printer Settings (Menu Settings)” on page 70.
5. Click **OK**. Close the Printers dialog box.



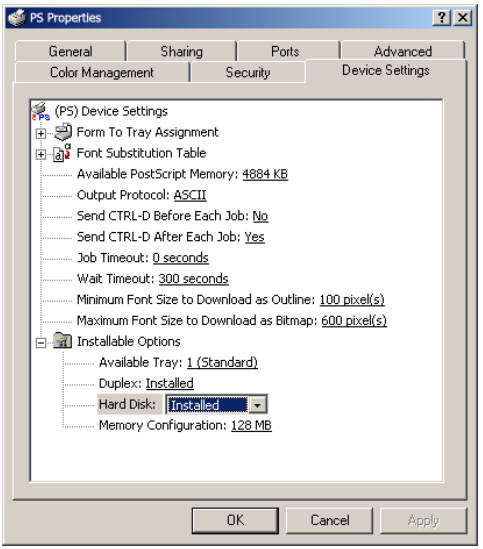
Hard Disk Drive: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, make sure **Hard Disk** is set to **Installed**.
5. Click **OK**. Close the Printers dialog box.



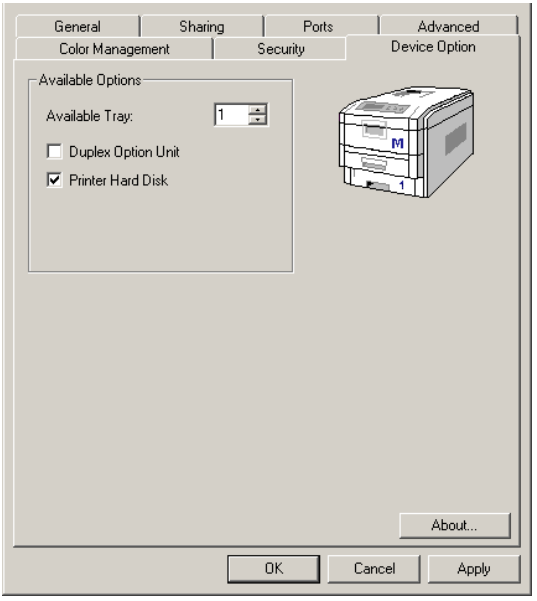
Hard Disk Drive: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. On the **Device Option** tab, click **Printer Hard Disk**.
4. Click **OK**. Close the Printers dialog box.



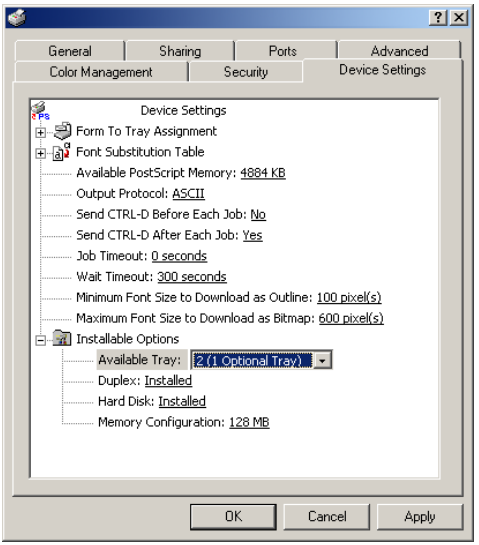
Paper Trays: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Device Settings** tab. Under **Installable Options**, click **Available Trays**, then select the appropriate number of trays (not including the Multi-purpose tray) in the drop-down list.
4. Click **OK**. Close the Printers dialog box.



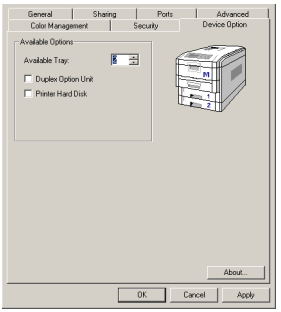
Additional Paper Trays: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. On the **Device Option** tab, select the appropriate number of trays (not including the Multi-purpose tray).
4. Click **OK**. Close the Printers dialog box.



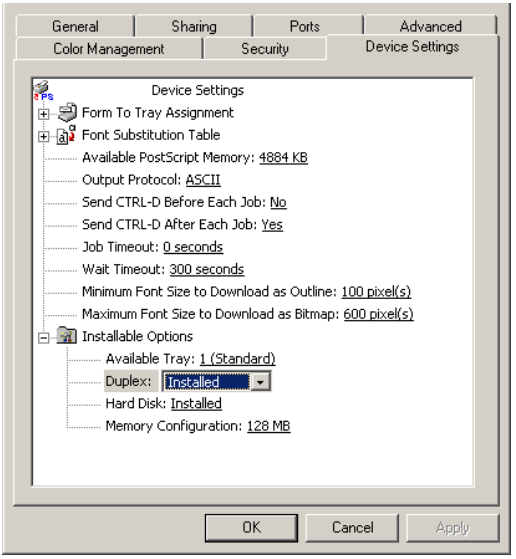
Duplex Unit: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Device Settings** tab. Under **Installable Options**, click **Duplex.** In the drop-down list, select **Installed**.
4. Click **OK**. Close the Printers dialog box.



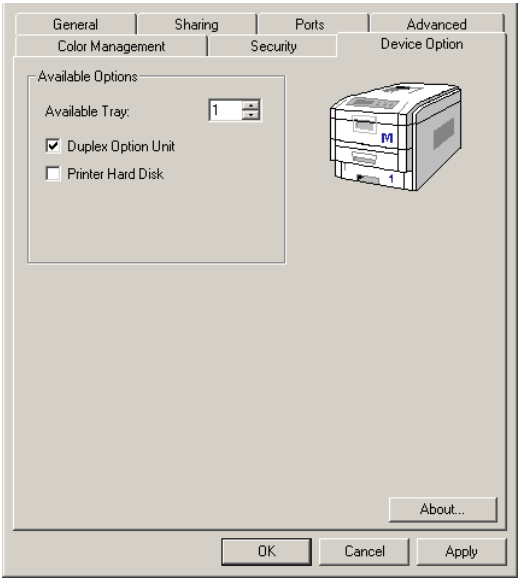
Duplex Unit: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Device Option** tab. Click **Duplex Option Unit**.
4. Click **OK**. Close the Printers dialog box.



Paper Feed, Size and Media

Changing Defaults

PostScript

The normal default for these items is automatic detection.

NOTE

If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

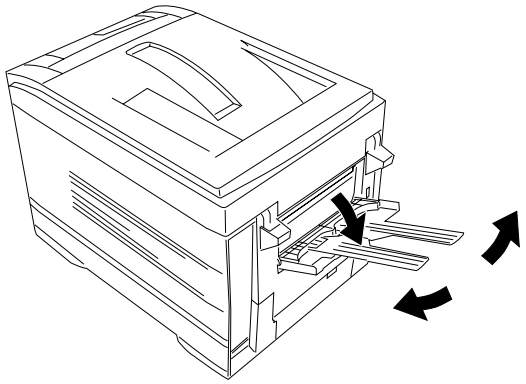
1. Click **Start** → **Settings** → **Printers**.
2. Right click the printer name. Click **Printing Preferences**.

Important!

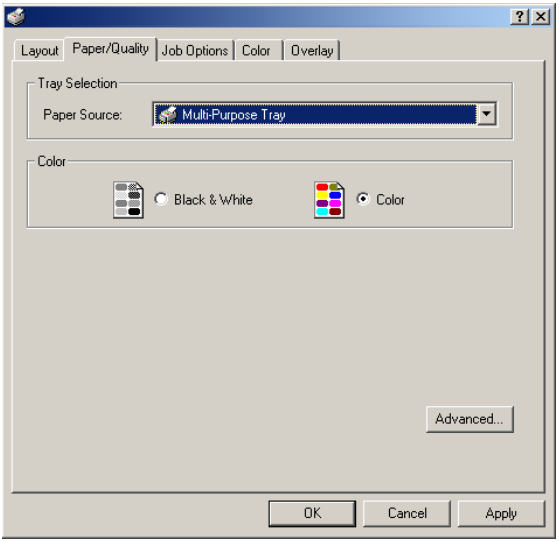
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

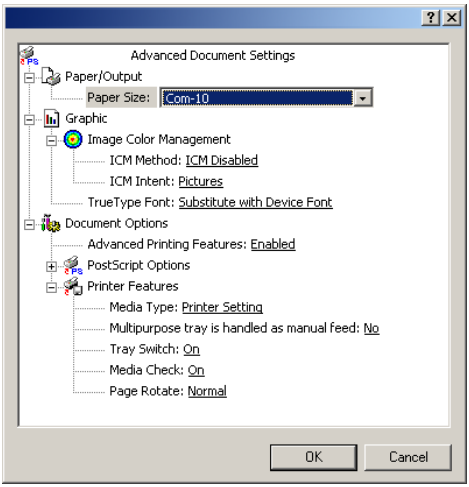
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



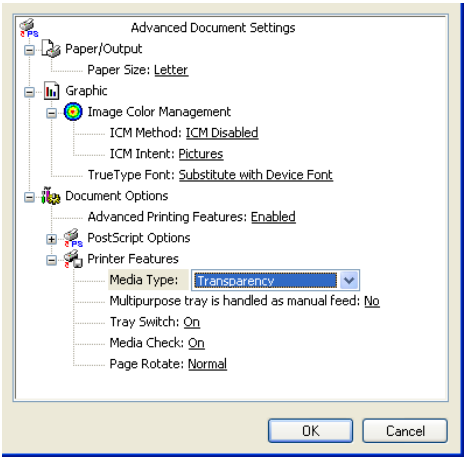
3. Click the **Paper/Quality** tab. Under **Tray Selection**, in the **Paper Source** drop-down list, select the paper feed.



4. Click the **Advanced** button.
5. Under **Paper/Output**, in the **Paper Size** drop-down list, select the media size.



6. Under **Document Options** → **Printer Features**, click **Media Type** and select the media from the drop-down list.
7. Click **OK** twice. Close the Printers dialog box.



Paper Feed, Size and Media

Changing Defaults

PCL

The normal default for these items is automatic detection.

NOTE

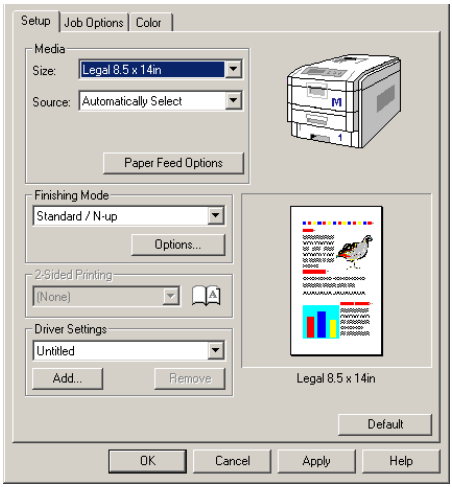
If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

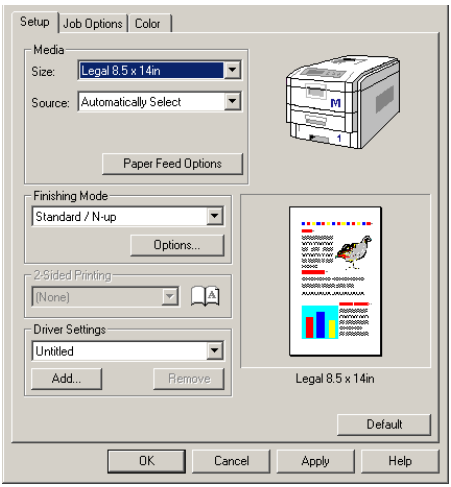
The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

1. Click **Start** → **Settings** → **Printers**.
2. Right click the printer name. Click **Printing Preferences**.

3. On the **Setup** tab, under **Media**, in the **Size** drop-down list, select the required paper size.



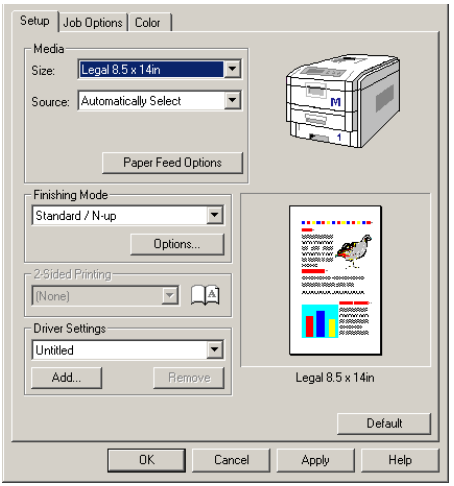
4. Select the required paper feed under **Source**.



NOTE

If a paper tray is selected, the Weight field becomes visible.

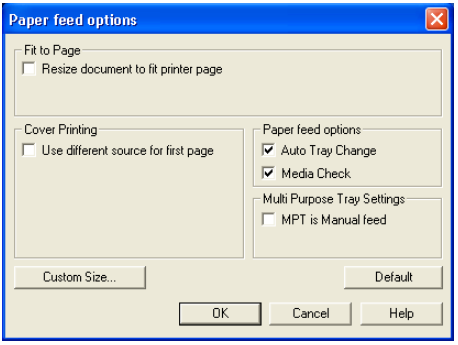
5. Select the required paper type under **Weight**.



NOTE

If Printer Setting is selected, make sure the printer has been set to the correct media type.

6. Click the **Paper Feed Options** button. Make any other selections. Click **OK**.



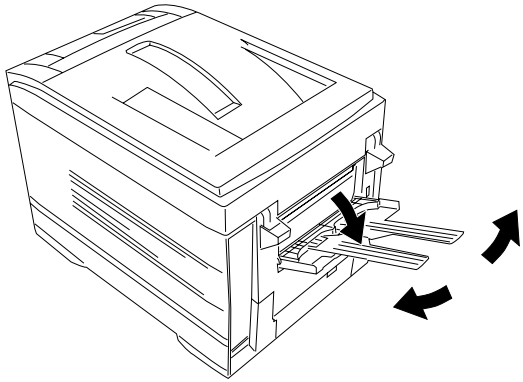
7. Click **OK** twice. Close the Printing Preferences dialog box.

Important!

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



Network Printer Status Utility

- Available on TCP/IP network connection only.

The Network Printer Status utility is available if your administrator has installed it.

If the utility is installed, the printer driver **Properties** dialog box changes:

- a new **Status** tab is added.
- an **Option** button is added to the **Device Option** tab.

This utility allows you to view (but not change) the status of the following on the **Status** tab:

- paper trays installed and the media assigned to them.
- total size and percentage used of disk/memory.
- percentage of toner remaining.

Important!

If you select **Automatic Status Update** in the **Status** tab, the driver automatically pings the printer for the latest status information every time you open the **Properties** dialog box.

This causes a significant delay until the Properties dialog box opens.

To avoid this, use the **Update Status** button in the **Status** tab to manually update the information on demand.

Windows 2000 Operation

NOTE

Most applications allow the printer properties to be accessed from within the document print dialog box.

This section explains how to set up color printing and how to use the printer's features.

Printer's features covered in this section include:

- N-up printing (see page 247)
- Custom page sizes (see page 250)
- Selecting print resolution (see page 259)
- Duplex printing (see page 260)
- Printing Booklets (see page 264)
- Watermarks (see page 269)
- Collating (see page 272)
- Proof and Print (see page 273)
- Secure print: printing confidential documents (see page 277)
- Storing files to the hard disk drive (see page 282)
- Using overlays (see page 286)
- Printing posters (see page 299)

Factors that Affect Color Printing

The PCL and PostScript printer drivers supplied with your printer provide several controls for changing the color output. For general use the default driver settings produce good results for most documents.

Many applications have their own color settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's color management functions.

If you wish to manually adjust the color settings in your printer driver, please be aware that *color reproduction is a complex topic, and there are many factors to take into consideration*.

Some of the most important factors are

- the differences between the range of colors a monitor can reproduce versus the range of colors that a printer can reproduce
- viewing conditions
- printer driver color settings
- monitor settings
- how your software application displays color
- paper type

Factors that Affect Color Printing

Monitor Colors vs. Printer Colors

(Differences between the range of colors a monitor or printer can reproduce)

- Neither a printer nor a monitor is capable of reproducing the full range of colors visible to the human eye. Each device is restricted to a certain range of colors. In addition to this, a printer cannot reproduce all of the colors displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent color. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Yellow, Magenta and Black (CMYK) toner or ink.
- A monitor can display very vivid colors such as intense reds and blues. These cannot be easily produced on any printer using toner or ink. Similarly, there are certain colors, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colors do not match the colors displayed on screen.

Viewing Conditions

A document can look very different under various lighting conditions. For example, the colors may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

Printer Driver Color Settings

The driver settings for Manual color can change the appearance of a document. There are several options available to help match the printed colors with those displayed on screen. These options are explained in subsequent sections of this User Manual.

Factors that Affect Color Printing

Monitor Settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor color temperature influences how "warm" or "cool" the colors look.

NOTE

Several of the Color Matching options make reference to your monitor's Color Temperature. Many monitors allow the color temperature to be adjusted through the monitor's control panel.

There are several settings found on a typical monitor:

- **5000k***

  Warmest; yellowish lighting, typically used in graphics arts environments.

- **6500k***

  Cooler; approximates daylight conditions.

- **9300k***

  Cool; the default setting for many monitors and television sets.

*k = degrees Kelvin, a measurement of temperature

Factors that Affect Color Printing

How your Software Application Displays Color

Some graphics applications such as CorelDRAW® or Adobe® Photoshop® may display color differently from "office" applications such as Microsoft® Word. Please see your application's online help or user manual for more information.

Paper Type

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

Color Matching

Choosing a Method

NOTE

These suggestions are for guidance only.

Your results may vary depending on the application from which you are printing.

Some applications override (without warning) any color matching settings in the printer driver.

There is no one way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible color.

However, the following guidelines may help in achieving good color output from your printer.

There are several suggested methods, depending on the type of document you are printing.

- most common [RGB] (see page 229)
- professional desktop publishing and graphics [CMYK] (see page 229)
- photographic images (see page 230)
- specific colors (i.e., a company logo) (see page 231)
- printing vivid colors (see page 232)

Color Matching

Choosing a Method

RGB or CMYK?

The guidelines for choosing a color matching method make distinctions between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Black (CMYK).

Generally, most documents you print are in RGB format. This is the most common format. If you do not know your document's color mode, assume that it is RGB.

Typically, CMYK documents are only supported in professional Desktop Publishing and Graphics applications.

Color Matching

Choosing a Method

Matching Photographs

RGB only

Oki Color Matching (see page 239) is a generally a good choice. Select a matching method appropriate to your monitor.

RGB or CMYK

If you are printing photographic images from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC-Profiles provided (see “Windows ICM Color Matching” on page 246). Print using the ICC profiles as the Print Space (or Output space).

Color Matching

Choosing a Method

Matching Specific Colors
(Example: Company logo)

RGB only

- Oki Color Matching (see page 239), and the sRGB setting: PCL or PS driver.
- PostScript Color Matching using the Absolute Colorimetric option (see page 241).
- Use the Color Swatch Utility to print out a chart of RGB swatches and enter your desired RGB values in your application's color picker—PS only (see page 236).

RGB or CMYK

- If you are printing from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC profiles provided (see “Windows ICM Color Matching” on page 246). Print using the ICC profiles as the Print Space (or Output space) (PS only).
- Alternatively, use PostScript Color Matching with the Absolute Colorimetric Setting (see page 241).

Color Matching

Choosing a Method

Printing Vivid Colors

RGB only

Use Oki Color Matching (see page 239), with the Monitor 6500k Vivid, sRGB or Digital Camera settings (PCL or PS).

RGB or CMYK

Use PostScript Color Matching (see page 241) with the Saturation option.

Color Matching

Color Matching Options

PCL Driver

The Color Matching Options in the PCL driver can be used to help match your printed colors to the ones displayed on your monitor.

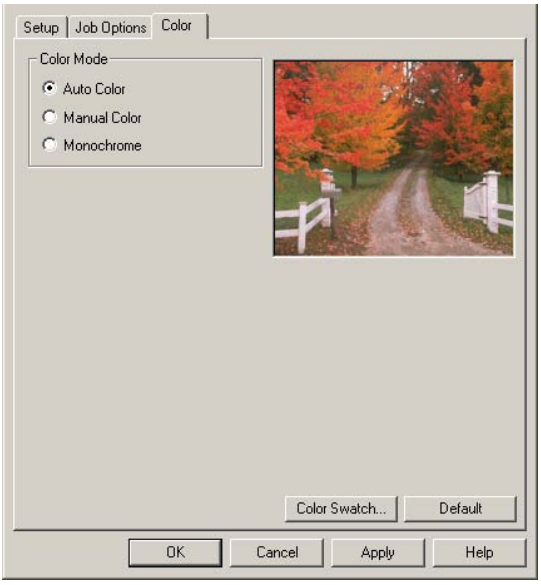
NOTE

The PCL driver's color options are only designed to work with RGB data.

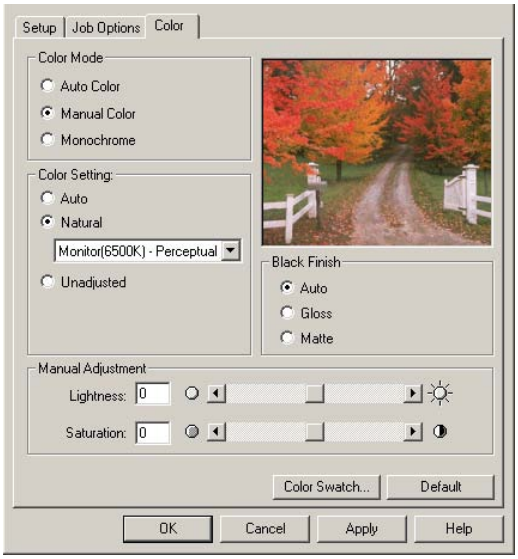
If you are printing CMYK data, we recommend you use the PostScript driver.

Manually set the options in the PCL driver:

1. Click **Start** → **Settings** → **Printers.**
2. Right click the appropriate printer name. Click **Printing Preferences**.
3. Click the **Color** tab.



4. Under **Color Mode**, click **Manual Color**.
5. Under **Color Setting**, click **Natural**.



6. Select the method you wish to use:

   Monitor (6500k) Perceptual

   Optimized for printing photographs when using a monitor with a color temperature of 6500K.

   Monitor (6500k) Vivid

   Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics.

   Monitor (9300k)

   Optimized for printing photographs when using a monitor with a color temperature of 9300K.

   Digital Camera

   Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

   sRGB

   Optimized for matching specific colors, such as a company logo color. The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.
7. Set any other required parameters. Use the on-line Help for guidance.
8. When you are done, click **OK**. Close the Printing Preferences dialog box.

Color Matching

Color Matching Options

Print Color Swatch Utility

For use with applications which allow you to set your own RGB values for colors.

The Color Swatch utility prints out charts of sample colors. Listed below each color are the corresponding RGB (Red, Green, Blue) values to use in your application to match that printed color.

An example of using the Print Color Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

1. Click **Start** → **Settings** → **Printers.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.
4. Click the **Color Swatch** button to print the color swatch samples.
5. Select the shade of red that best suits your needs. Make a note of the RGB value below that particular shade.
6. Use your program's color picker to enter the same RGB values (from step 5). Change the logo to that color.

NOTE

The RGB color displayed on your monitor may not necessarily match what was printed on the color swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce color.

Color Matching

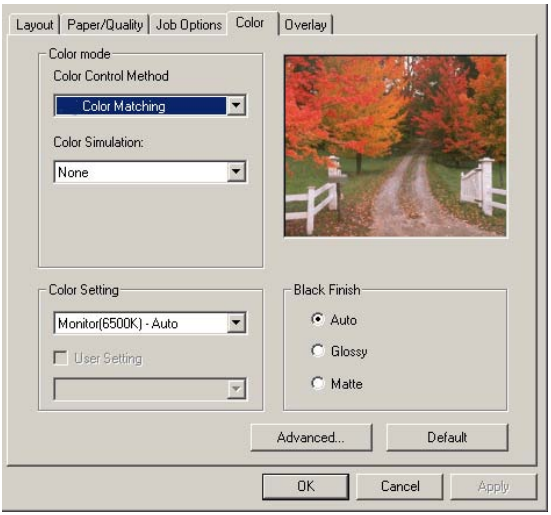
Color Matching Options

PostScript Driver

The PostScript driver offers several different methods of controlling the color output of the printer.

Setting Options Manually

1. Click **Start** → **Settings** → **Printers.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.



4. Under **Color Mode**, use the drop-down list to select one of the following **Color Control Method**s:

   a. OKI Color Matching

   This is OKI's proprietary color matching system. It affects *RGB data only*. See "OKI Color Matching" on page 239.

   b. PostScript Color Matching

   This uses PostScript Color Rendering Dictionaries built into the printer. It affects both RGB and CMYK data. See "PostScript Color Matching" on page 241.

   c. Using ICC Profiles

   This option provides a method of matching RGB colors similar to Windows ICM matching. See "Using ICC Profiles" on page 243.

   d. No Color Matching

   Use this option to switch off all printer color matching. No color correction occurs when selected. This option is good when other matching regimens are used, specifically if you select a Color Simulation option.

   e. Print in Grayscale

   This option prints all documents as monochrome. No color prints. The printer interprets all colors as a variation of grays.

Color Matching

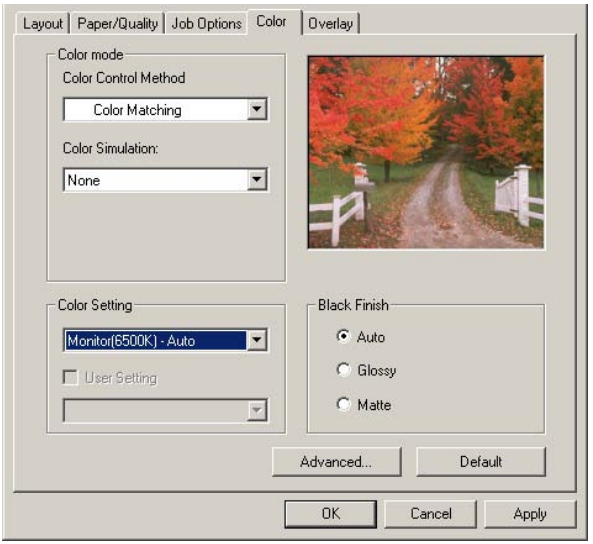
Color Control Method

OKI Color Matching

PostScript

This is OKI's proprietary color matching system, and affects *RGB data only*. This is the default setting. It provides the fastest, best color matching for your printer.

Under **Color Setting**, use the drop-down list to select the type to be used



Color Matching

Color Control Method

OKI Color Matching

PostScript

Color Settings

Monitor (6500k) Auto

Optimized for printing general documents when using a monitor with a color temperature of 6500K.

Monitor (6500k) Perceptual

Optimized for printing photographs when using a monitor with a color temperature of 6500K. This is best for printing photographic images.

Monitor (6500k) Vivid

Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics and text. Vivid or Digital Camera settings produce brightest colors.

Monitor (9300k)

Optimized for printing photographs when using a monitor with a color temperature of 9300K.

Digital Camera

Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken. Vivid or Digital Camera settings produce brightest colors.

sRGB

Optimized for matching specific colors, such as a company logo color. This option attempts to simulate RGB color.

The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.

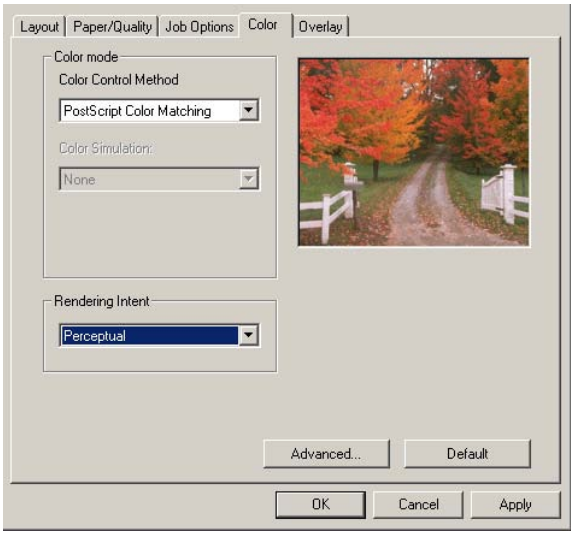
Color Matching

Color Control Method

PostScript Color Matching

This uses PostScript Color Rendering Dictionaries built into the printer. It affects both RGB and CMYK data.

From the **Rendering Intent** drop-down list, select the rendering type.



Color Matching

Color Control Method

PostScript Color Matching

Rendering Intents

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

The printer driver provides the rendering intents listed below:

- *Auto*
  Best choice for printing general documents.
- *Perceptual*
  Best choice for printing photographs. Compresses the source gamut into the printer's gamut while maintaining the overall appearance of an image. This option attempts to simulate RGB color.
- *Saturation*
  Best choice for printing bright and saturated colors if you don't necessarily care how accurate the colors are. This makes it the recommended choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.
- *Relative Colorimetric*
  Good for proofing CMYK color images on a desktop printer. Much like Absolute Colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute Colorimetric, Relative Colorimetric attempts to take the paper white into account.
- *Absolute Colorimetric*
  Best for printing solid colors and tints (such as Company logos). Matches colors common to both devices exactly. Clips the out of gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

Color Matching

Color Control Method

Using ICC Profiles

PostScript Only

- Affects **RGB data only**.

This provides a method of matching RGB colors similar to Windows ICM matching. The main advantage it has over Windows ICM color matching is that it provides a method of printing using both input and output profiles. Windows ICM matching only allows output profiles to be chosen.

Input Profiles (e.g., a digital camera) provide information about the color in the original device that was used to capture or display the image data. For example, an input device could be a scanner, digital camera, or monitor.

Output Profiles (e.g., the printer) provide information about the device to which you are printing.

The Using ICC Profiles feature uses both the input and output profiles to generate a CRD (Color Rendering Dictionary), which is used to match the colors as closely as possible.

NOTE

This feature may not work for all application programs. However, many professional graphics applications offer a similar feature in their print settings, with the ability to choose a source (input) color space, and a print (output) color space.

Color Matching

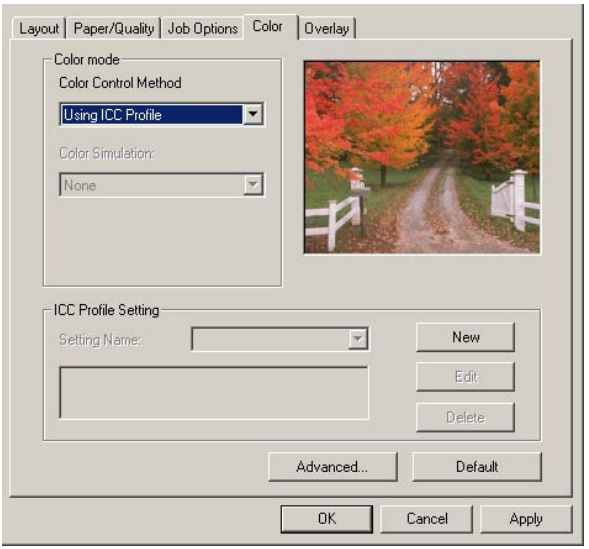
Color Control Method

Using ICC Profiles

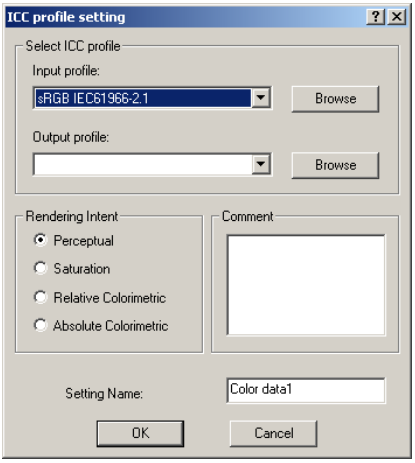
PostScript Only

Setting Up

1. Click **Start** → **Settings** → **Printers.**
2. Right click the printer name. Click **Printing Preferences**.
3. Click the **Color** tab.
4. Under **Color mode**, in the **Color Control Method** drop-down list, select **Using ICC Profile**.



5. Click the **New** button.



6. Under **Select ICC profile**, use the drop-down lists to select the **Input profile** and **Output profile**.
7. Select the desired **Rendering Intent** (see “Rendering Intents” on page 242). Type in a name for the profile. Click **OK**.
   The new name appears in the **Setting Name** drop-down list under **ICC Profile Setting**.
8. Repeat steps 5-7 for each ICC profile you wish to define.
9. Click **OK**. Close the Printers dialog box.

Color Matching

Color Control Method

Windows ICM Color Matching

PCL or PostScript

- ICM is the color management system built into Windows.
- Affects **RGB data only**.
- Can be associated with either the PCL or PS driver

Windows ICM uses ICC profiles for your monitor and printer. These profiles describe the colors that your device is capable of reproducing. ICC profiles can be associated with your printer via the **Color Management** tab of the printer driver.

Depending on how you have installed the printer driver, the color profiles may already be associated with the driver.

To associate ICC Color Profiles with the printer driver:

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**, then **Properties**.
3. Click the **Color Management** tab.
4. Under "**Color Profiles currently associated with this printer**", you should see the names of profiles that match your printer model. If you do not see any profiles associated with the driver, click "**Add...**" and locate the ICC profiles for your printer.

Windows ICM uses the information in these profiles to convert colors in your documents to colors that the printer can reproduce. The way in which this conversion is performed can be controlled via the ICM Intent control in the printer driver.

NOTE

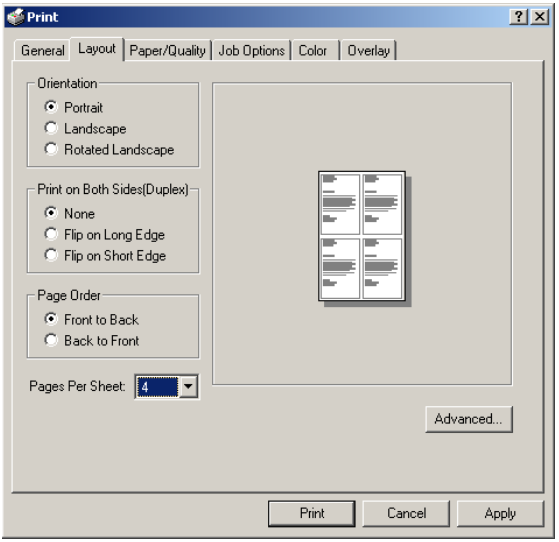
The Color Match "Using ICC Profiles" feature provides an alternative to Windows ICM. It is similar to Windows ICM, but offers several additional features.

Printing Multiple Pages on One Sheet

(N-Up Printing)

PostScript

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Layout** tab
3. Under **Pages Per Sheet**, select the required number of pages.
4. Click **Print**.

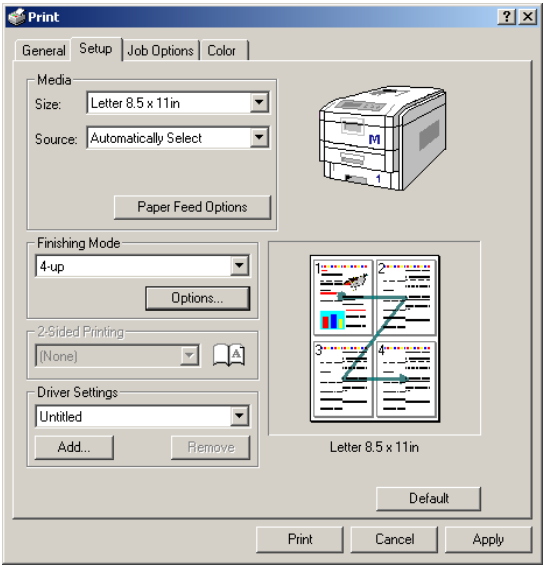


Printing Multiple Pages on One Sheet

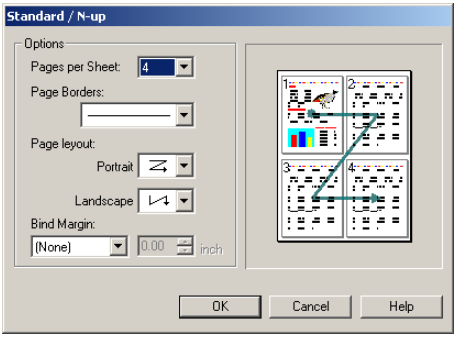
(N-Up Printing)

PCL

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Setup** tab.
3. Under **Finishing Mode**, select the required number of pages per sheet.



4. Click the **Options** button. Select the **Page Borders**, **Page Layout** and **Bind Margin**. Click **OK**.
5. Click **OK**. Click **Print**.



Custom Page Sizes

PostScript

NOTE

One custom paper size can be defined in the PostScript driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

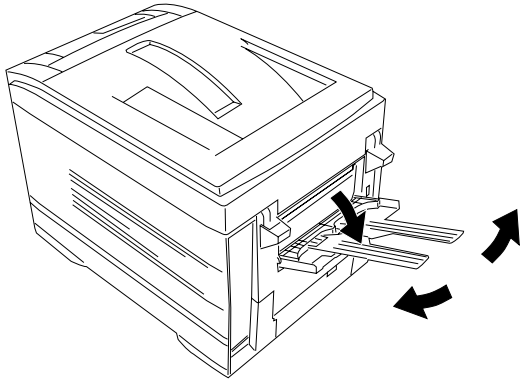
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Paper/Quality** tab.

Important!

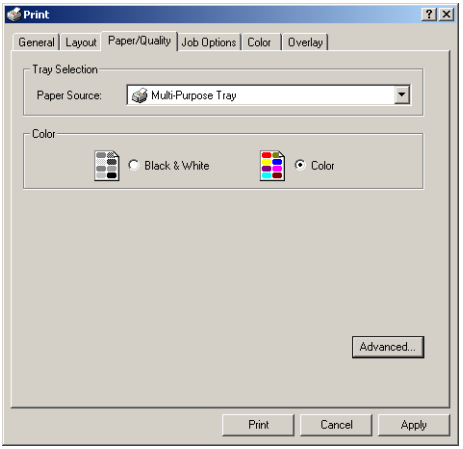
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

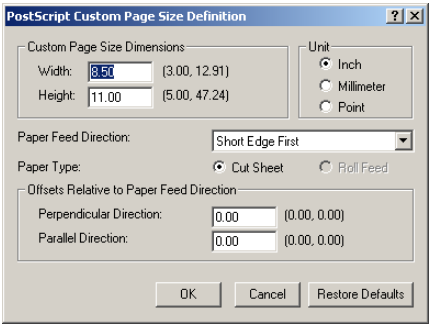
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



3. Under **Tray Selection**, in the **Paper Source** drop-down list, select **Multi Purpose (MP) Tray**.



4. Click the **Advanced** button. Under **Paper/Output,** in the **Paper Size** drop-down list, select **Postscript Custom Page Size**.



5. Enter the **Width** and **Height** for the custom paper.
   Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]
6. Select the **Paper Feed Direction**. Click **OK**.

NOTE

- **Long Edge First = media feeds in long edge first**
- **Short Edge First = media feeds in short edge first**
- **Long Edge First (flipped) = Reserved for future use.**
- **Short Edge First (flipped) = Reserved for future use.**

7. Click **OK**.
8. Click **Print**.

Custom Page Sizes

PCL

NOTE

Up to 32 custom page sizes can be defined in the PCL driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

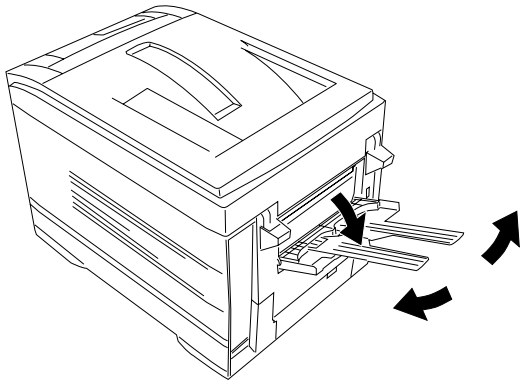
- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

Important!

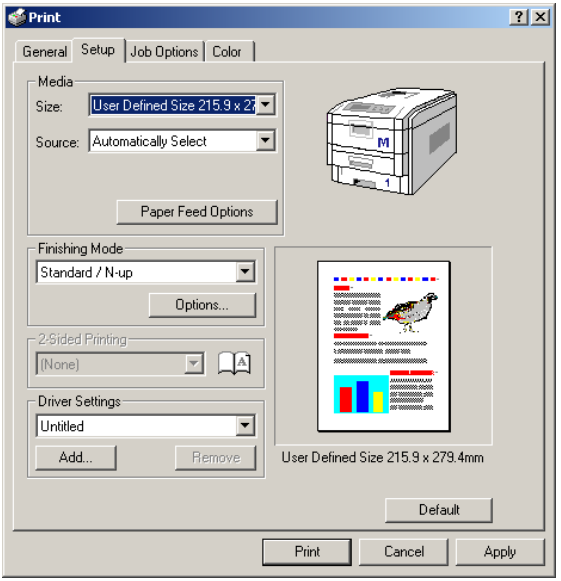
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



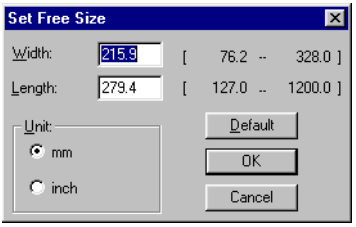
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Setup** tab.
3. Under **Media**, in the **Size** drop-down list, select **User Defined Size**. The Set Free Size dialog box appears.



NOTE

You may see a Warning dialog box indicating a conflict. If you do, click OK. The driver automatically makes the needed changes to correct for the conflict.

4. Select the unit. Enter the width and length measurements. Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]

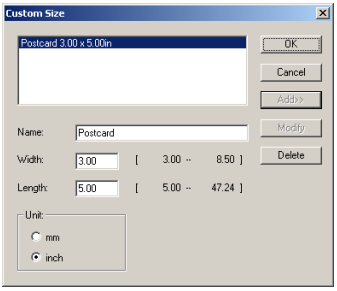


5. Click **OK**.
6. Make sure that **User Defined** now appears in the **Size** list on the **Setup** tab.

NOTE

To save the setting for future use:

- **Click Paper Feed Options. Click Custom Size.**
- **Select the unit. Enter the relevant information for Width and Height. Give your custom size a name under Name.**
- **Click Add.**



- **Click OK.**

The Custom Page Size is added to the bottom of the Paper Size list.

7. Click **OK**.
8. Click **Print**.

Print Resolution

PCL or PostScript

Changing for a Print Job

NOTE

To change the settings to apply to all jobs (default settings):

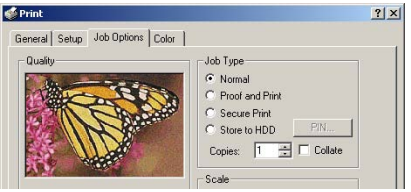
- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

1. Open the file in your application. Select **File → Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver.
3. Click the **Job Options** tab.
4. Under **Quality**, select the required printing resolution

PostScript Driver

PCL Driver



5. Select **Toner Saving** (if appropriate).
6. Click **Print**.

Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Usage Restrictions

NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name. Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

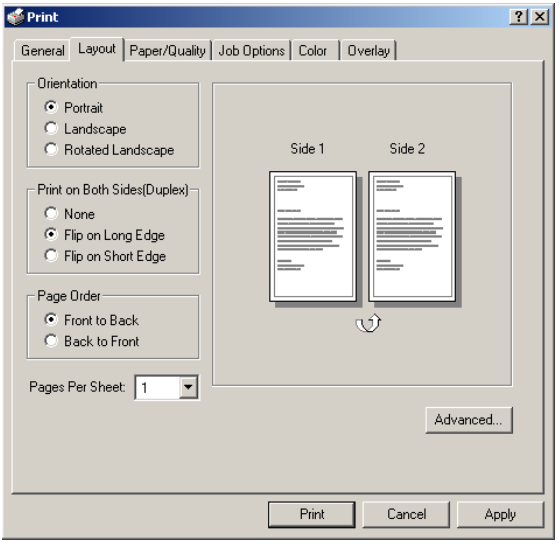
Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Layout** tab.
3. Under **Print on Both Sides**, select **Flip on Long Edge** or **Flip on Short Edge**.
4. Click **Print**.



Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Usage Restrictions

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- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

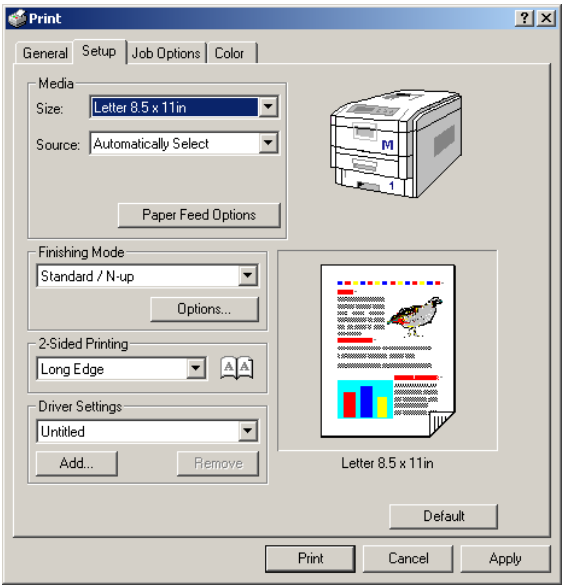
Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Setup** button.
3. Under **2-Sided Printing**, select **Long Edge** or **Short Edge**.
4. Click **Print**.



Printing Booklets

PostScript

NOTES

- **You must have the duplex unit installed and enabled in order to print booklets.**
- **Not available on some network connections. See the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

Important!

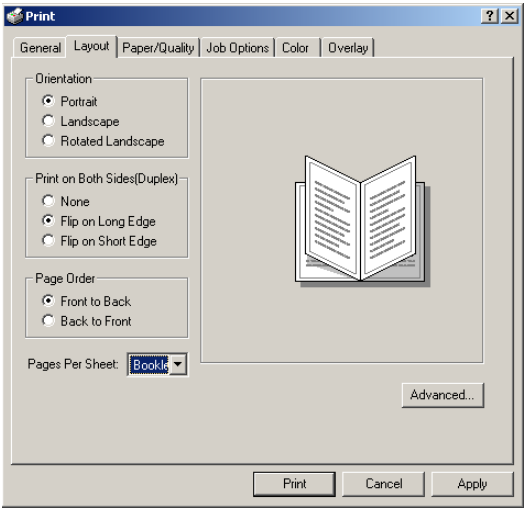
Booklet printing with the PostScript driver is restricted to two (2) pages per sheet

Examples:

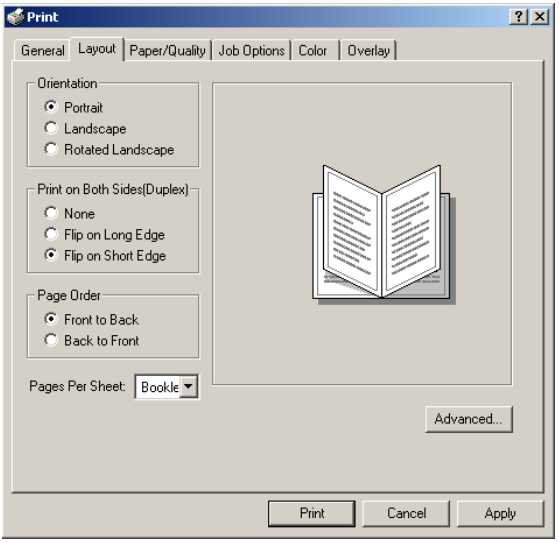
- print a 5½ x 8½ inch booklet on 8½ x 11 inch paper
- print an 8½ x 11 inch booklet on 11 x 17 inch paper

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PS driver. Click the **Layout** tab.

3. Under **Pages Per Sheet**, in the drop-down list, select **Booklet**.



4. Under **Print on Both Sides (Duplex)**, select **Flip on Short edge**.
5. Click **Print**.



Printing Booklets

PCL

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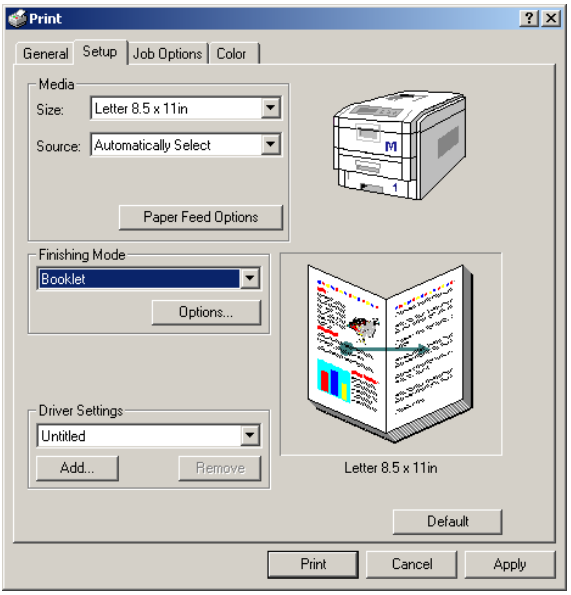
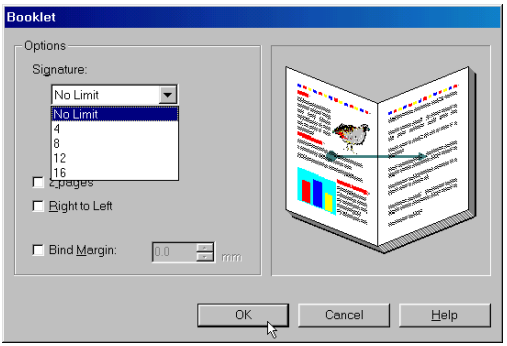
- **Not available on some network connections: see the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Setup** tab.
3. Under **Finishing Mode**, in the drop-down list, select **Booklet**.



4. Click the **Options** button. Set the **Signature**, **2pages**, **Right to Left**, and **Bind Margin**, as required. See the online Help for information. Click **OK**.
5. Click **Print**.

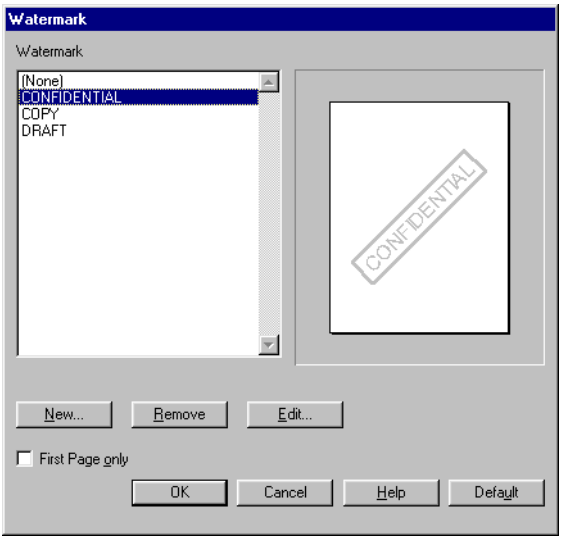


Printing Watermarks

PCL Only

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Job Options** tab.
3. Click **Watermark**.

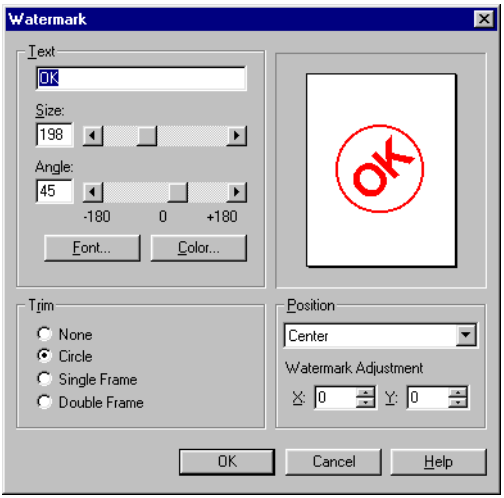
4. Select a name from the **Watermark** list.



NOTE

To create a new watermark or edit an existing watermark:

- **Click the New or Edit button.**



- **Enter the text for the watermark. Select the attributes (font, size, angle) to be used.**
- **Click OK.**

The new watermark appears in the Watermark list.

5. If you wish to print the watermark only on the first page of the document, select **First Page only**.
6. Click **OK**.
7. Click **Print**.

Collating

PCL or PostScript

Collating can be carried out with or without a hard disk drive installed. A printers with a hard disk drive performs better.

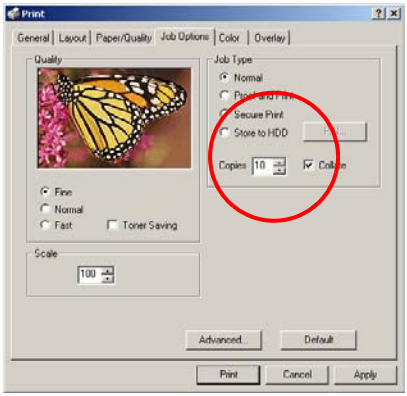
Important

If your software application has a collate option, use it instead of the collate option in the printer driver.

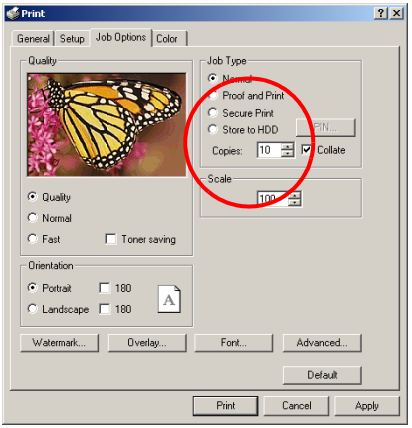
To use the printer driver to select collating:

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Job Options** tab.
3. Under **Job Type**, enter the number of copies required. *Only if the application has no collate option*—select **Collate**.
4. Click **Print**.

PostScript Driver



PCL Driver



Proof and Print

PCL or PostScript

Using

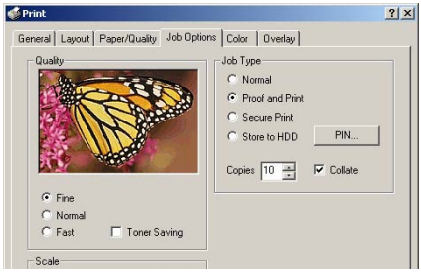
Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

NOTES

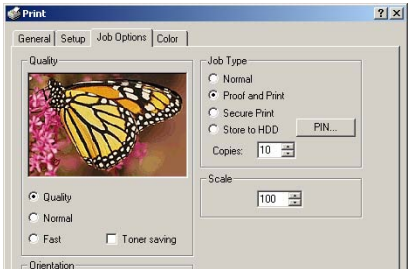
- **The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed. Only one copy is printed.**
- **If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.**
- **Proof and print may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Job Options** tab.
3. Enter the number of copies. If required, select **Collate**.

PostScript Driver



PCL Driver

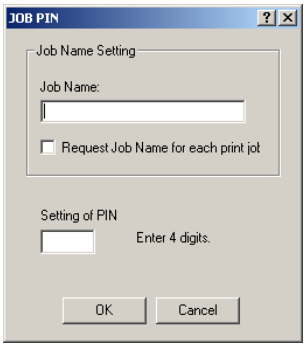


a. Under **Job Type**, select **Proof and Print**.

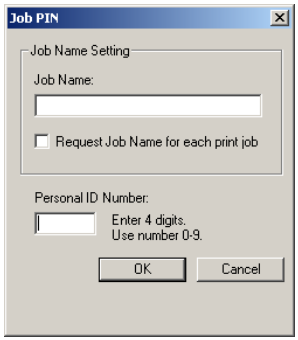
b. Enter a job name of up to 16 characters under **Job Name Setting**. If required, select **Request Job Name for each print job**.

c. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

PostScript Driver



PCL Driver



4. Click **Print**. The document is stored on the hard disk drive. One copy is printed for checking.

5. After checking the proof, print or delete (if incorrect) the remaining copies of the document. Use the procedures given below.

Proof and Print

Printing Copies

1. Press the MENU button to access the **PRINT JOBS MENU**. Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the remaining copies of the document.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Proof and Print

Deleting Copies

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. The deletion confirmation message appears. Press the SELECT button to delete the remaining copies.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Secure Printing

(Printing Confidential Documents)

PCL or PostScript

Using Secure Printing

Secure printing (printing with passwords) allows you to print confidential documents on printers that are shared with other users in a network environment.

NOTE

- **The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.**
- **Secure printing may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Job Options** tab.
3. Under **Job Type**, select **Secure Print**.

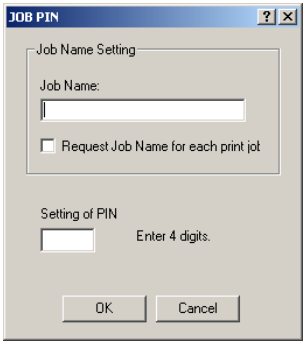
NOTE

If you've already used Secure Print to place a document on the hard disk drive, but have not yet printed it out, click the PIN button and enter a new job name.

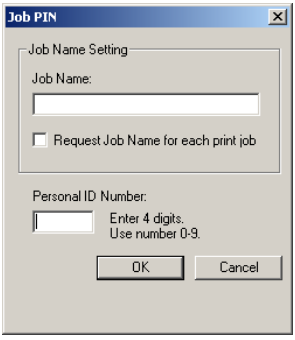
a. Enter a job name of up to 16 characters under **Job Name.** If required, select **Request Job Name for each print job**.

b. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

PostScript Driver

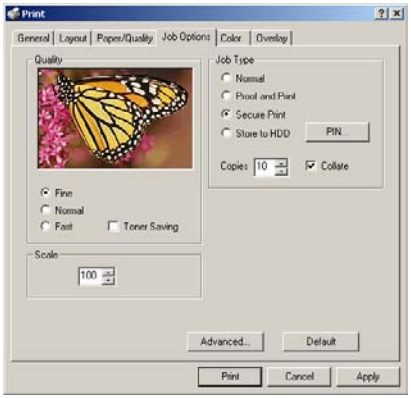


PCL Driver



4. Enter the number of copies. If required, select **Collate**.

PostScript Driver



PCL Driver

5. Click **Print**. The document is stored on the printer's hard disk.
6. Go to the printer. Use the front panel to print out the document. See below.

Secure Printing

(Printing Confidential Documents)

Printing at the Printer

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button.
   The document prints. It is deleted from the hard disk drive.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Secure Printing

(Printing Confidential Documents)

Deleting the confidential document before printing it

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the job from the printer.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

PCL or PostScript

Storing a Document

Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead, stationery, etc.

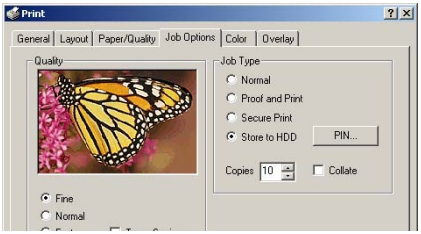
NOTE

- **The internal hard disk must be installed in the printer and enabled.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.**
- **Store to Hard Disk may not be available in some software applications.**

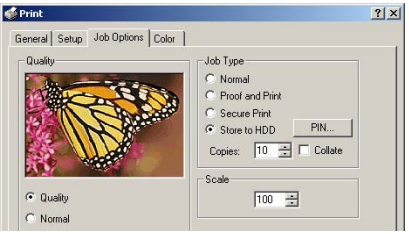
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate driver. Click the **Job Options** tab.
3. Select **Store to HDD**.

4. Select the number of copies. Click **Collate**, if applicable.

PostScript Driver



PCL Driver



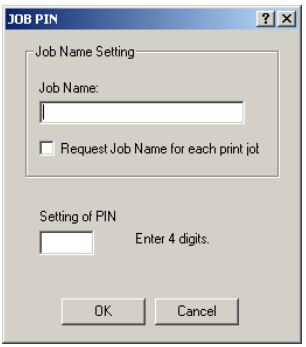
NOTE

If you've already stored a document on the printer's hard disk drive, and want to store another one, click the PIN button and enter a new Job Name.

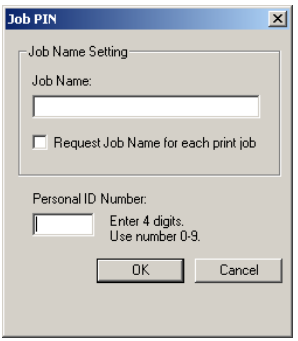
a. Enter a job name of up to 16 characters under **Job Name Setting.** If required, select **Request Job Name for each print job**.

b. Type a four digit personal ID number from 0000 to 7777. Then, click **OK**.

PostScript Driver



PCL Driver



5. Click **Print**. The document is stored on the hard disk. It can then be printed on demand, or deleted. Use the procedures given below.

Hard Disk Drive

Printing a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the document.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

Deleting a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Overlays

What are Overlays?

An overlay can be a combination of graphics, fonts, or text that is stored in the printer's flash memory or on the hard disk (supplied on some models, optional on others), and printed whenever required. The result is similar to the Watermark feature, but with the ability to be much more elaborate.

Overlays can be useful for tasks such as printing letterheads, forms, or invoices, and should reduce the need for pre-printed stationery.

Example of Using Overlays

Suppose that you have created and stored three files in the printer using the Storage Device Manager:

- the company logo
- the company address
- the company mission statement.

The Overlay feature allows these files to be incorporated into your document in various combinations, depending on your requirements.

Creating Overlays

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead).
2. Use the printer driver to generate a PRN file (print file).
3. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format.
4. Download the storable file to the printer.

Once someone has set up all the necessary overlay files on the printer, other users only have to switch on the required settings in the printer driver to use the overlays.

NOTE

- **The internal hard disk must be installed in the printer to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for overlay to operate correctly.**
- **An overlay may consist of more than one component file.**

Creating documents to use as overlays

PCL

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

To create a print (PRN) file:

1. Open in your application program. Open the file to be stored as an overlay. Choose **File**, then **Print**.
2. Make sure that the "**Print To File**" option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model. Click the **Properties** dialog box. This should open the printer driver settings.

Important

You must use the Oki PCL driver to do this.

4. Choose all of the printer driver settings with which you would like your overlay to print.
5. Try to keep the overlay to a single sheet. Don't use N-up, duplex, finisher options, etc. when creating an overlay. These can be added when printing the document that includes the overlay.
6. Click **OK** to close the Properties dialog box.
7. Click **Print**.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as "my template.prn."

Creating documents to use as overlays

PostScript

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

1. Open in your application program. Open the file to be stored as an overlay. Choose **File,** then **Print**.
2. Make sure that the **Print To File** option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model. Then click **Properties...** This should open the printer driver settings.

Important

You must use the Oki PostScript driver to do this.

4. Select the **Job Options** tab. Click the **Overlays...** button.
5. Choose **Create Form** from the menu.
6. Click **OK** to close the Properties dialog box.
7. Click **OK** to print the document to a file.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as “my template.prn.”

Downloading the print file to use as an overlay

In the previous topic, you created a print (PRN) file on your PC's hard disk. This topic explains how to use the Storage Device Manager to download this file to the printer.

The Storage Device Manager software is included with the original software CDs that were supplied with your printer.

1. Launch Storage Device Manager.
   Allow the program to discover (locate) the printer.
2. Click **Project**. Click **New Project**.
3. From the **Project** menu, select **Add File to Project.**
4. Select the PRN file(s) that you created earlier.
   PCL: This automatically generates a BIN file.
   PostScript: This automatically generates a PostScript hst file.

Important!

At this step, look in the project window.

The BIN file is assigned an ID number.

You can change this ID number by double-clicking it. Enter a new one in the ID field.

5. Note the name that the file is assigned in the Storage Device Manager. *Names are case sensitive*.

NOTE

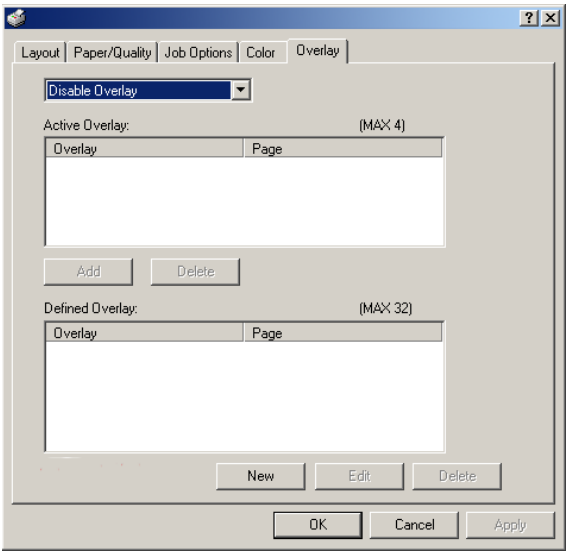
The assigned file name is very important! You must use this ID number or name when creating overlays in the printer driver. You should change the ID number or name from the default value. *Note the new name for later use*.

6. Make sure the printer being used is highlighted in the lower window of the Storage Device Manager.
7. Select the **Project** menu.
8. Choose **Send Project Files to Printer**.
   This downloads the file to the printer.
   If the file was downloaded successfully, "Command Issued" displays.
9. Close the Storage Device Manager.

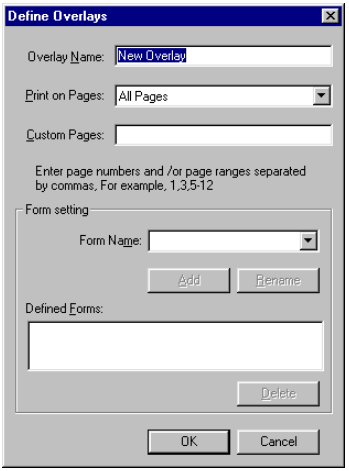
Defining Overlays

PostScript

1. Click **Start** → **Settings** → **Printers.**
2. RIght click the printer name. Click **Printing Preferences**.
3. Click the **Overlay** tab.
4. Click the **Overlay** button.



5. Click the **New** button.

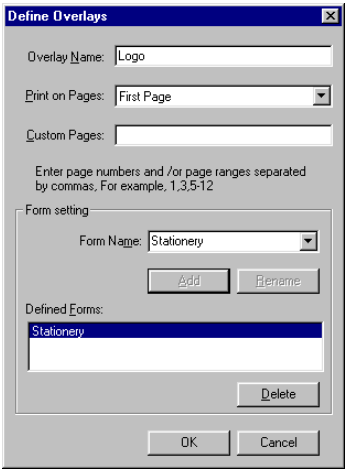


6. In the **Overlay Name** list, enter the file name of the overlay. Select the pages where you want the overlay to print.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. The file is stored on the printers' hard disk drive under this name. The name is case sensitive.

7. Under **Form setting**, in the Form Name drop-down list, enter or select a form name. Click **Add.**

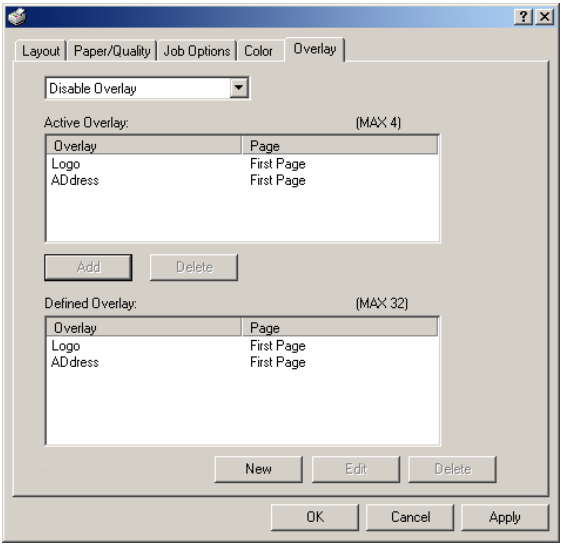


NOTE

The Form Name is a random name of your selection.

8. Click **OK**.
9. To continue to add files to the overlay (if required), repeat steps 5 through 8.
10. Under **Defined Overlay,** highlight the overlay name(s).

11. Click **Add** to add the overlay(s) to the list under Active Overlay. To select more than one overlay, hold the CTRL key while clicking on each name.

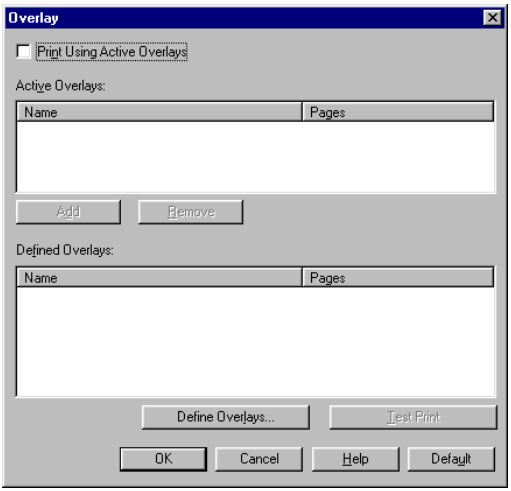


12. At the top of the dialog box, use the drop-down list to select **Use Overlay**. Click **OK**.
13. Click **OK** to close the Printing Preferences dialog box.

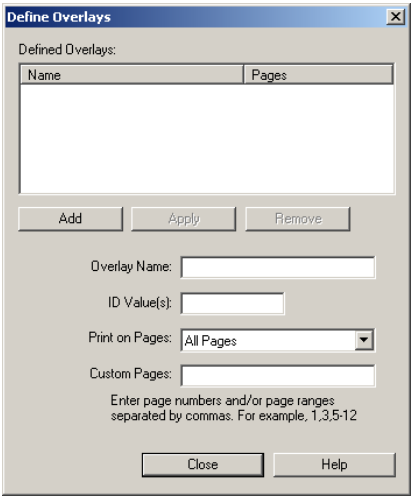
Defining Overlays

PCL

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **Printing Preferences**.
3. Click the **Job Options** tab.
4. Click the **Overlay...** button.



5. To define an overlay, click the **Define Overlays** button.



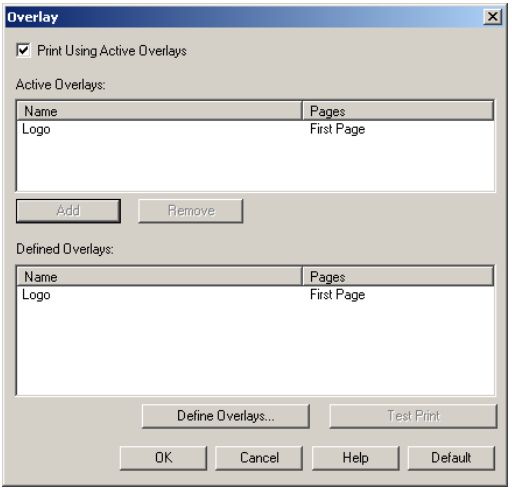
6. In the **Overlay Name** list, enter the file name of the overlay.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. The file is stored on the printers' hard disk drive under this name. The name is case sensitive.

7. In **ID Values,** enter the ID of the file. Please refer to the instructions for the Storage Device Manager utility.
8. To select the pages where the overlay prints, use:
   Print on Pages
   or
   Custom Pages (to select specific page numbers in the document).
9. Click **Add**.
10. Click **Close**.
11. Under **Defined Overlay**, highlight the overlay name. Click the **Add** button to add the overlay to the list in **Active Overlays**.

12. Select **Print Using Active Overlays**.



13. Click **OK**.

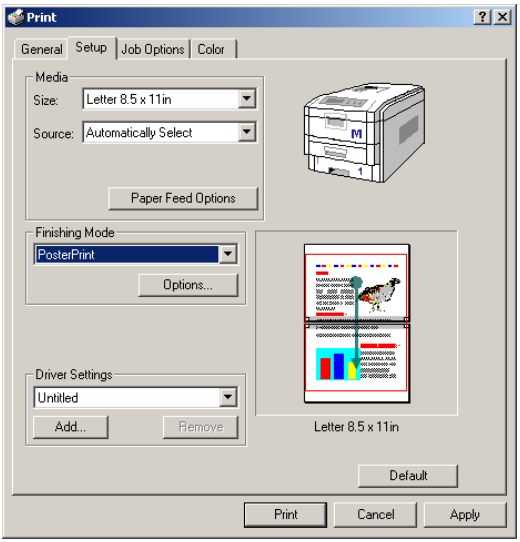
14. Click **OK** to close the Printing Preferences dialog box.

Printing Posters

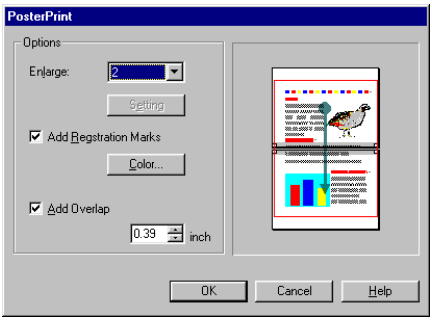
PCL Only

This option allows you to configure and print posters by breaking up the document page into multiple pieces. Each piece prints, enlarged, on a separate sheet. Then, the separate sheets are combined to produce a poster. It is only available with the PCL printer driver.

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, on the **General** tab, click the appropriate PCL driver. Click the **Setup** tab.
3. Under **Finishing Mode**, select **Poster Print**.



4. Click **Options...** Enter the configuration details.
5. Click **OK**.
6. Click **Print**.



Windows Me/98/95 Printer Drivers

See your printed *Software Installation Guide* for information on installing printer drivers.

You can also go to **http://my.okidata.com** to view and/or download a copy of the *Software Installation Guide* or for the latest information on drivers for your printer.

Which Printer Driver to Use?

Your printer comes with Windows drivers for PCL and Adobe® PostScript® (PS). You can install either of these, or both if you wish. Which driver you choose depends on your application.

- If you use TrueType fonts and you do not print PostScript (including ".eps" files) graphics, choose the PCL driver. This is more efficient and give good results.
- If you use PostScript fonts or print PostScript graphics, choose the PostScript driver. In this situation, performance is faster and graphics are printed at their best quality.

NOTE

The line art graphics in this manual are PostScript. If you plan to print parts of this manual, choose the PostScript driver. Otherwise, the line art graphics print at low resolution. The print quality may not be satisfactory.

If neither driver seems to cover all your needs, you should install both drivers. Select the same printer port (LPT1 or Network Port) for both drivers during the installation.

Set the driver you plan to use most of the time to be your Windows default driver. Most applications allow you to choose a different printer from within the print dialog, so you can use the alternative driver for printing whenever you need to.

Memory: Enabling

PostScript Only

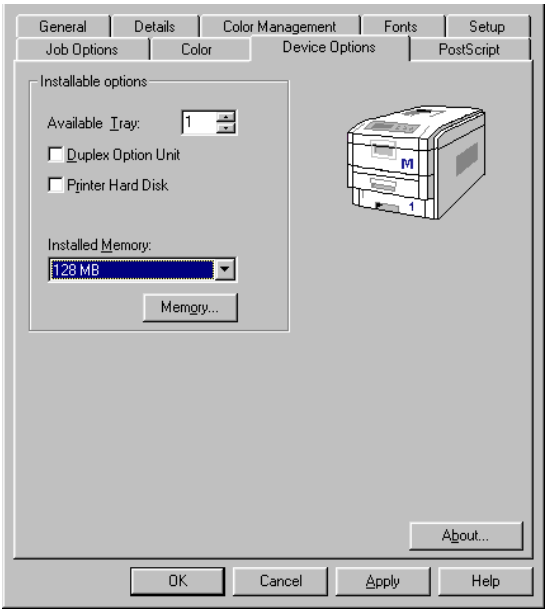
Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

If you have additional memory in your printer, use these instructions to update the Windows PostScript driver so that it recognizes the additional memory:

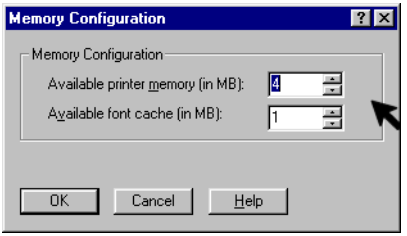
1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Options** tab.
4. Under **Installed Memory**, set the memory in the drop-down list to be the same as that now installed in the printer, as shown in the Menu Map.

   To print the Menu Map, see “Printer Settings (Menu Settings)” on page 70.



5. To specify usable printer memory size, click the **Memory...** button. The driver automatically adjusts font cache size according to the memory option selected under **Installed**.

6. Click **OK** twice.



Hard Disk Drive: Enabling

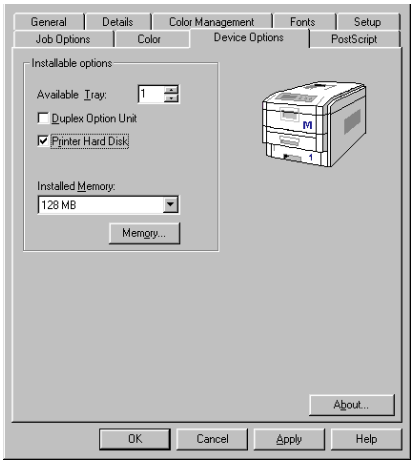
PostScript or PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

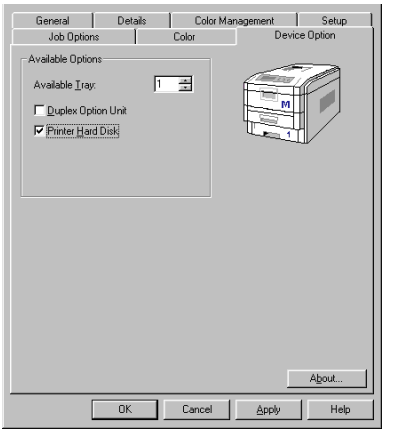
Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Options** tab.
4. Select **Printer Hard Disk.** A checkmark appears in the box.
5. Click **OK**.

PostScript Driver



PCL Driver



Paper Trays: Enabling

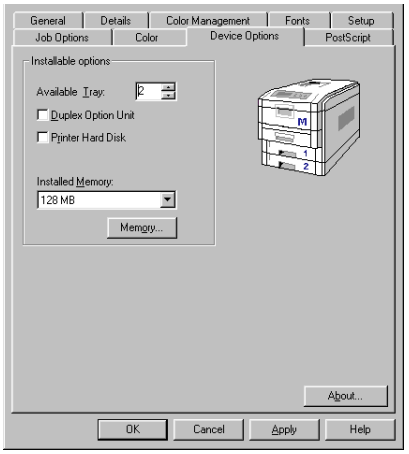
PostScript or PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

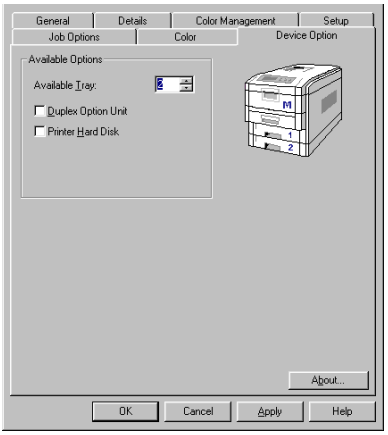
Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Options** tab.
4. Next to **Available Trays**, select the appropriate number of trays (not including the Multi-purpose tray) in the list.
5. Click **OK**.

PostScript Driver



PCL Driver



Duplex Unit: Enabling

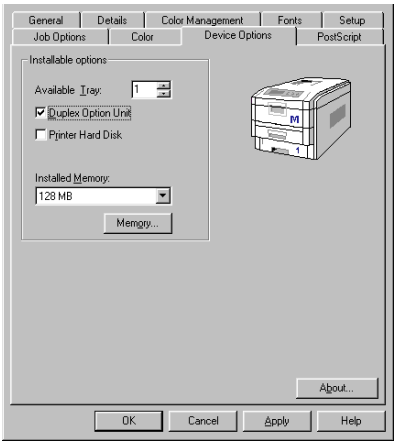
PostScript or PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

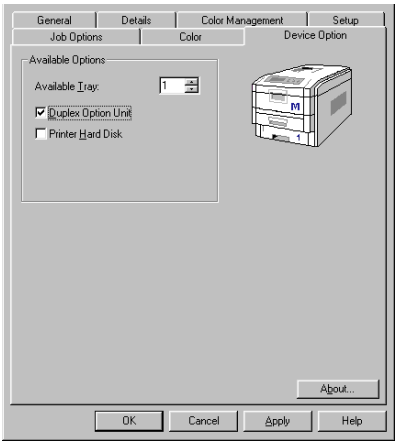
Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Options** tab.
4. Select **Duplex Option Unit**. A checkmark appears in the box.
5. Click **OK**.

PostScript Driver



PCL Driver



Paper Feed, Size and Media

Changing Defaults

PostScript or PCL

The normal default for these items is automatic detection.

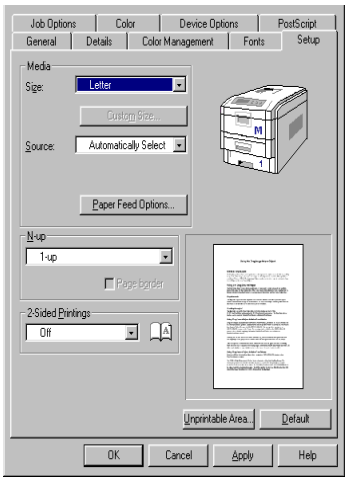
NOTE

If the settings in the printer differ from those selected on your computer, the printer does not print.
An error message displays.

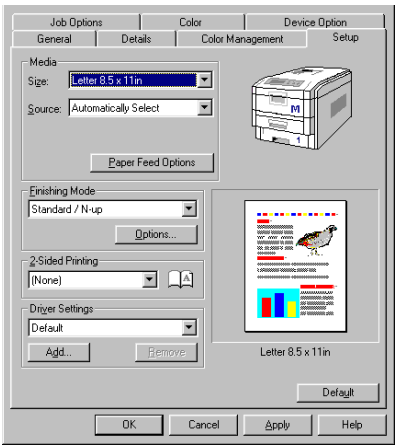
The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

1. Click **Start** → **Settings** → **Printers**.
2. Right click the printer name. Click **File** then **Properties**.
3. Click the **Setup** tab.

PostScript Driver



PCL Driver



4. Select the required paper size under **Size**.
5. Select the required paper feed under **Source**.

NOTE

When a paper tray is selected, the Type or Weight field becomes visible.

6. PostScript: Select the required paper type under **Type**.
   PCL: Select the required paper type under **Weight** (PCL).

NOTE

If Printer Setting is selected, make sure the printer has been set to the correct media type.

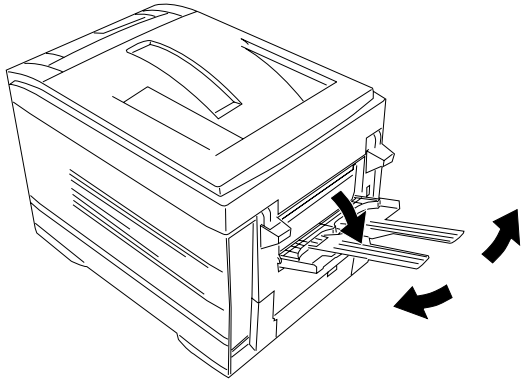
7. Click **Paper Feed Options.**

Important!

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

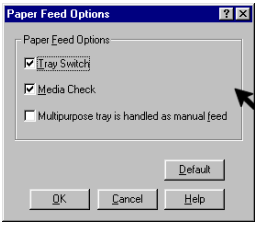
For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.

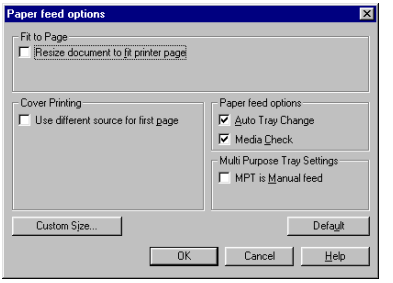


8. Make any other selections,
9. Click **OK**.
10. Click **OK** to close the printer dialog box.

PostScript Driver



PCL Driver



Network Printer Status Utility

- Available on TCP/IP network connection only.

The Network Printer Status utility is available if your administrator has installed it. If the utility is installed, the printer driver **Properties** dialog box changes:

- a new **Status** tab is added.
- an **Option** button is added to the **Device Option** tab.

This utility allows you to view (but not change) the status of the following on the **Status** tab:

- paper trays installed and the media assigned to them.
- total size and percentage used of disk/memory.
- percentage of toner remaining.

Important!

If you select **Automatic Status Update** in the **Status** tab, the driver automatically pings the printer for the latest status information every time you open the **Properties** dialog box.

This causes a significant delay until the Properties dialog box opens.

To avoid this, use the **Update Status** button in the **Status** tab to manually update the information on demand.

Windows Me/98/95 Operation

NOTE

Most applications allow the printer properties to be accessed from within the document print dialog box.

This section explains how to set up color printing and how to use the printer's features.

Printer's features covered in this section include:

- N-up printing (see page 336)
- Custom page sizes (see page 340)
- Selecting print resolution (see page 349)
- Duplex printing (see page 351)
- Printing Booklets (see page 353)
- Watermarks (see page 357)
- Collating (see page 359)
- Proof and Print (see page 361)
- Secure print: printing confidential documents (see page 365)
- Storing files to the hard disk drive (see page 369)
- Using overlays (see page 374)
- Printing posters (see page 387)

Factors that Affect Color Printing

The PCL and PostScript printer drivers supplied with your printer provide several controls for changing the color output. For general use the default driver settings produce good results for most documents.

Many applications have their own color settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's color management functions.

If you wish to manually adjust the color settings in your printer driver, please be aware that *color reproduction is a complex topic, and there are many factors to take into consideration*.

Some of the most important factors are

- the differences between the range of colors a monitor can reproduce versus the range of colors that a printer can reproduce
- viewing conditions
- printer driver color settings
- monitor settings
- how your software application displays color
- paper type

Factors that Affect Color Printing

Monitor Colors vs. Printer Colors

(Differences between the range of colors a monitor or printer can reproduce)

- Neither a printer nor a monitor is capable of reproducing the full range of colors visible to the human eye. Each device is restricted to a certain range of colors. In addition to this, a printer cannot reproduce all of the colors displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent color. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Yellow, Magenta and Black (CMYK) toner or ink.
- A monitor can display very vivid colors such as intense reds and blues. These cannot be easily produced on any printer using toner or ink. Similarly, there are certain colors, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colors do not match the colors displayed on screen.

Factors that Affect Color Printing

Viewing Conditions

A document can look very different under various lighting conditions. For example, the colors may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

Printer Driver Color Settings

The driver settings for Manual color can change the appearance of a document. There are several options available to help match the printed colors with those displayed on screen. These options are explained in subsequent sections of this User Manual.

Factors that Affect Color Printing

Monitor Settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor color temperature influences how "warm" or "cool" the colors look.

NOTE

Several of the Color Matching options make reference to your monitor's Color Temperature. Many monitors allow you to adjust the color temperature through their control panels.

There are several settings found on a typical monitor:

- **5000k***

  Warmest; yellowish lighting, typically used in graphics arts environments.

- **6500k***

  Cooler; approximates daylight conditions.

- **9300k***

  Cool; the default setting for many monitors and television sets.

*k = degrees Kelvin, a measurement of temperature

Factors that Affect Color Printing

How your Software Application Displays Color

Some graphics applications such as CorelDRAW® or Adobe® Photoshop® may display color differently from "office" applications such as Microsoft® Word. Please see your application's online help or user manual for more information.

Paper Type

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

Color Matching

Choosing a Method

General Information

NOTE

These suggestions are for guidance only. Your results may vary depending on the application from which you are printing. Some applications override, without warning, any color matching settings in the printer driver.

There is no one way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible color.

However, the following guidelines may help in achieving good color output from your printer.

There are several suggested methods, depending on the type of document you are printing.

- most common [RGB] (see page 319)
- professional desktop publishing and graphics [CMYK] (see page 319)
- photographic images (see page 320)
- specific colors (i.e., a company logo) (see page 321)
- printing vivid colors (see page 322)

Color Matching

Choosing a Method

RGB or CMYK?

The guidelines for choosing a color matching method make distinctions between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Black (CMYK).

Generally, most documents you print are in RGB format. This is the most common, and, if you do not know your document's color mode, assume that it is RGB.

Typically, CMYK documents are only supported in professional Desktop Publishing and Graphics applications.

Color Matching

Choosing a Method

Matching Photographs

RGB only

Oki Color Matching (see page 329) is a generally a good choice. Select a matching method appropriate to your monitor.

RGB or CMYK

If you are printing photographic images from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC profiles provided (see “Windows ICM Color Matching” on page 335). Print using the ICC profiles as the Print Space (or Output space).

Color Matching

Choosing a Method

Matching Specific Colors
(Example: Company logo)

RGB only

- Oki Color Matching (see page 329), and the sRGB setting: PCL or PS driver.
- PostScript Color Matching using the Absolute Colorimetric option (see page 331).
- Use the Color Swatch Utility to print out a chart of RGB swatches and enter your desired RGB values in your application's color picker—PS only (see page 326).

RGB or CMYK

- If you are printing from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC profiles provided (see “Windows ICM Color Matching” on page 335). Print, using the ICC profiles as the Print Space (or Output space) (PS only).
- Alternatively, use PostScript Color Matching with the Absolute Colorimetric Setting (see page 331).

Color Matching

Choosing a Method

Printing Vivid Colors

RGB only

Use Oki Color Matching (see page 329), with the Monitor 6500k Vivid, sRGB or Digital Camera settings (PCL or PS).

RGB or CMYK

Use PostScript Color Matching (see page 331) with the Saturation option.

Color Matching

Color Matching Options

PCL Driver

The Color Matching Options in the PCL driver can be used to help match your printed colors to the ones displayed on your monitor.

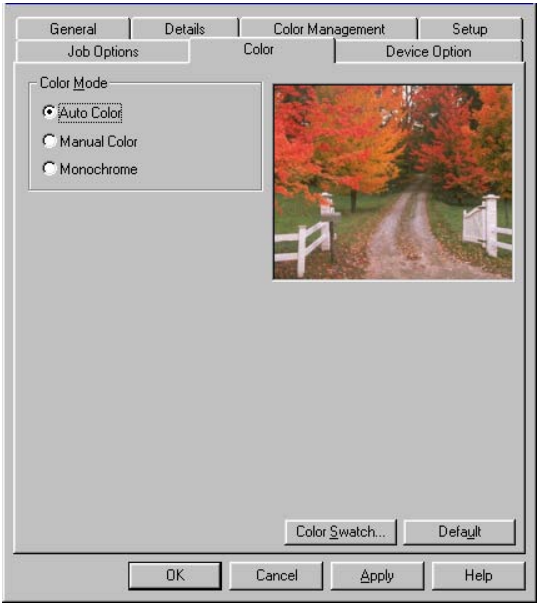
NOTE

The PCL driver's color options are only designed to work with RGB data.

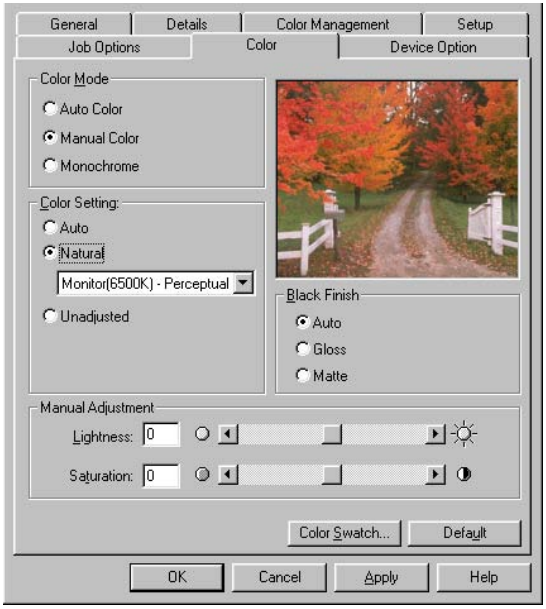
If you are printing CMYK data, we recommend you use the PostScript driver.

Manually set the options in the PCL driver:

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the appropriate printer name. Click **File**. Click **Properties**..
3. Click the **Color** tab.



4. Under **Color Mode,** click **Manual Color**.
5. Under **Color Setting**, click **Natural**.



6. Select the method you wish to use:

   Monitor (6500k) Perceptual

   Optimized for printing photographs when using a monitor with a color temperature of 6500K.

   Monitor (6500k) Vivid

   Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics.

   Monitor (9300k)

   Optimized for printing photographs when using a monitor with a color temperature of 9300K.

   Digital Camera

   Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

   sRGB

   Optimized for matching specific colors, such as a company logo color. The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.
7. Set any other required parameters. Use the on-line Help for guidance.
8. When you are done, click **OK**. Close the Properties dialog box.

Color Matching

Color Matching Options

Print Color Swatch Utility

For use with applications which allow you to set your own RGB values for colors.

The Color Swatch utility prints out charts of sample colors. Listed below each color are the corresponding RGB (Red, Green, Blue) values to use in your application to match that printed color.

An example of using the Print Color Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Color** tab.
4. Click the **Color Swatch** button to print the color swatch samples.
5. Select the shade of red that best suits your needs. Note of the RGB value below that particular shade.
6. Use your program's color picker to enter the same RGB values (from step 5). Change the logo to that color.

NOTE

The RGB color displayed on your monitor may not necessarily match what was printed on the color swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce color.

Color Matching

Color Matching Options

PostScript Driver

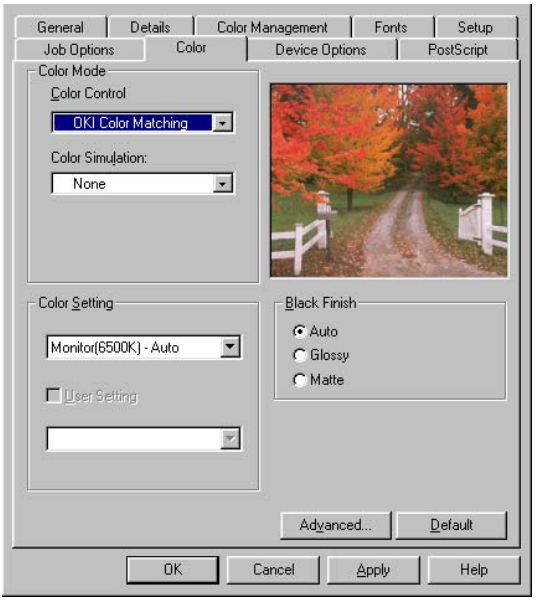
The PostScript driver offers several different methods of controlling the color output of the printer.

Color Matching Option	RGB data	CMYK data
Oki Color Matching	Yes	No
PostScript Color Matching	Yes	Yes
Windows ICM Matching[a]	Yes	No
Using ICC Profiles	Yes	No

a. Not Windows NT 4.0

Setting Options Manually

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**..
3. Click the **Color** tab.



4. Under **Color Mode**, use the Color Control drop-down list to select one of the following **Color Control Method**s:

   a. OKI Color Matching

   This is OKI's proprietary color matching system, and affects *RGB data only*. See "OKI Color Matching" on page 329.

   b. PostScript Color Matching

   This uses PostScript Color Rendering Dictionaries built into the printer, and affects both RGB and CMYK data. See "PostScript Color Matching" on page 331.

   c. Using ICC Profiles

   This option provides a method of matching RGB colors similar to Windows ICM matching. See "Using ICC Profiles" on page 333.

   d. Windows ICM

   This is the color management system built into Windows.

   See "Windows ICM Color Matching" on page 335.

   e. No Color Matching

   Use this option to switch off all printer color matching. No color correction occurs when selected. This option is beneficial when other matching regimens are used, specifically if you select a Color Simulation option.

   f. Print in Grayscale

   This option prints all documents as monochrome. No color prints. The printer interprets all colors as a variation of grays.

Color Matching

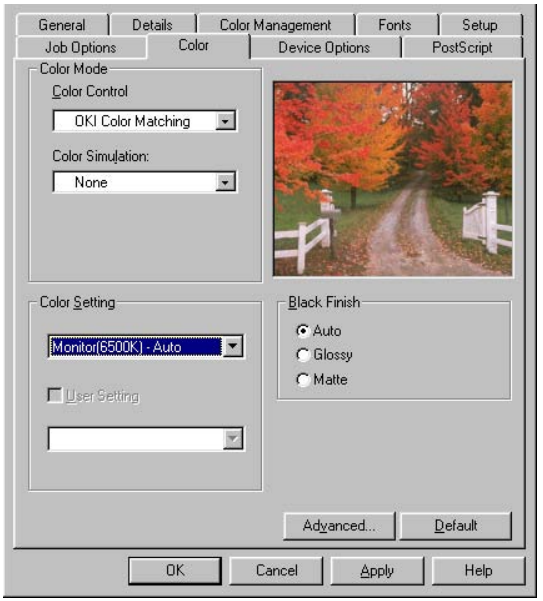
Color Control Method

PostScript Driver

OKI Color Matching

This is OKI's proprietary color matching system. It affects *RGB data only*. This is the default setting. It provides the fastest, best color matching for your printer.

Under **Color Setting,** use the drop-down list to select the type to be used:



Color Matching

Color Control Method

PostScript Driver

OKI Color Matching

Color Settings

Monitor (6500k) Auto

Optimized for printing general documents when using a monitor with a color temperature of 6500K.

Monitor (6500k) Perceptual

Optimized for printing photographs when using a monitor with a color temperature of 6500K. This is best for printing photographic images.

Monitor (6500k) Vivid

Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics and text. Vivid or Digital Camera settings produce brightest colors.

Monitor (9300k)

Optimized for printing photographs when using a monitor with a color temperature of 9300K.

Digital Camera

Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken. Vivid or Digital Camera settings produce brightest colors.

sRGB

Optimized for matching specific colors, such as a company logo color. This option attempts to simulate RGB color.

The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.

Color Matching

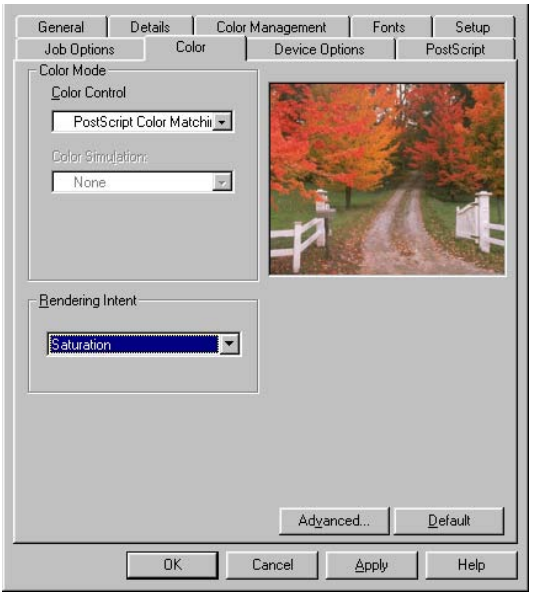
Color Control Method

PostScript Driver

PostScript Color Matching

This uses PostScript Color Rendering Dictionaries built into the printer. It affects both RGB and CMYK data.

From the **Rendering Intent** drop-down list, select the rendering type.



Color Matching

Color Control Method

PostScript Driver

PostScript Color Matching

Rendering Intents

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

The printer driver provides the rendering intents listed below:

- *Auto*
  Best choice for printing general documents.
- *Perceptual*
  Best choice for printing photographs. Compresses the source gamut into the printer's gamut while maintaining the overall appearance of an image. This option attempts to simulate RGB color.
- *Saturation*
  Best choice for printing bright and saturated colors if you don't necessarily care how accurate the colors are. This makes it the recommended choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.
- *Relative Colorimetric*
  Good for proofing CMYK color images on a desktop printer. Much like Absolute Colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute Colorimetric, Relative Colorimetric attempts to take the paper white into account.
- *Absolute Colorimetric*
  Best for printing solid colors and tints (such as company logos). Matches colors common to both devices exactly. Clips the out of gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

Color Matching

Color Control Method

PostScript Driver

Using ICC Profiles

- Affects **RGB data only**.

This provides a method of matching RGB colors similar to Windows ICM matching. The main advantage it has over Windows ICM color matching is that it provides a method of printing using both input and output profiles. Windows ICM matching only allows output profiles to be chosen.

Input Profiles (e.g., a digital camera) provide information about the color in the original device that was used to capture or display the image data. For example, an input device could be a scanner, digital camera, or monitor.

Output Profiles (e.g., the printer) provide information about the device to which you are printing.

The Using ICC Profiles feature uses both the input and output profiles to generate a CRD (Color Rendering Dictionary), which is used to match the colors as closely as possible.

NOTE

This feature may not work for all application programs. However, many professional graphics applications offer a similar feature in their print settings, with the ability to choose a source (input) color space, and a print (output) color space.

Color Matching

Color Control Method

PostScript Driver

Using ICC Profiles

Setting Up

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**..
3. Click the **Color** tab.
4. Under **Color mode**, in the **Color Control Method** drop-down list, select **Using ICC Profile**.
5. Click the **New** button.
6. Under **Select ICC profile**, use the drop-down lists to select the **Input profile** and **Output profile**.
7. Select the desired **Rendering Intent** (see “Rendering Intents” on page 332). Type in a name for the profile. Click **OK**.
   The new name appears in the **Setting Name** drop-down list under **ICC Profile Setting**.
8. Repeat steps 5-7 for each ICC profile you wish to define.
9. Click **OK**. Close the Printers dialog box.

Color Matching

Color Control Method

PostScript Driver

Windows ICM Color Matching

PCL or PostScript

- ICM is the color management system built into Windows.
- Affects **RGB data only**.
- Can be associated with either the PCL or PS driver

Windows ICM uses ICC profiles for your monitor and printer. These profiles describe the colors that your device is capable of reproducing. ICC profiles can be associated with your printer via the **Color Management** tab of the printer driver.

Depending on how you have installed the printer driver, the color profiles may already be associated with the driver.

To associate ICC Color Profiles with the printer driver:

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**.
3. Click the **Color Management** tab.
4. Under "**Color Profiles currently associated with this printer**", you should see the names of profiles that match your printer model. If you do not see any profiles associated with the driver, click "**Add...**" and locate the ICC profiles for your printer.

Windows ICM uses the information in these profiles to convert colors in your documents to colors that the printer can reproduce. The way in which this conversion is performed can be controlled via the ICM Intent control in the printer driver.

NOTE

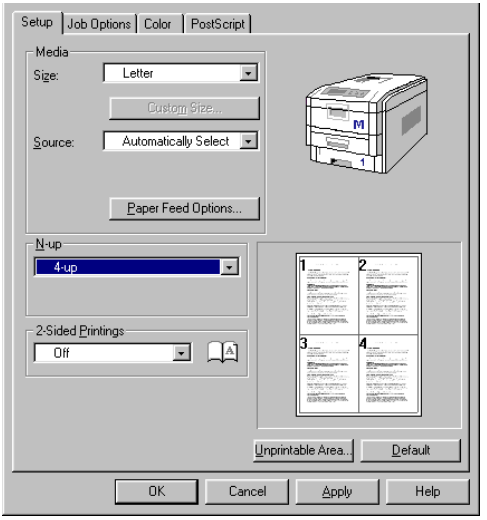
The Color Match "Using ICC Profiles" feature provides an alternative to Windows ICM. It is similar to Windows ICM, but offers several additional features.

Printing Multiple Pages on One Sheet

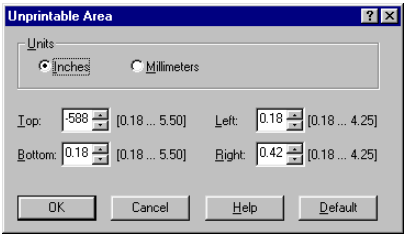
(N-Up Printing)

PostScript

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. On the **Setup** tab, under **N-up**, select the required number of pages per sheet.
5. Click **OK**. Click **Print**.



6. Click the **Unprintable Area** button. Set the margin parameters. Click **OK**.



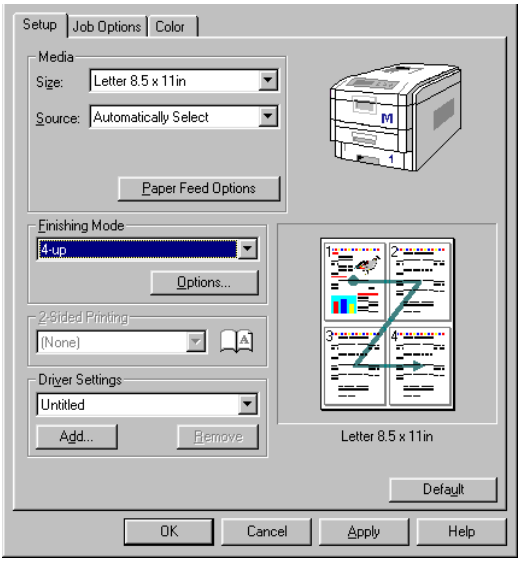
7. Click **OK**. Print the document.

Printing Multiple Pages on One Sheet

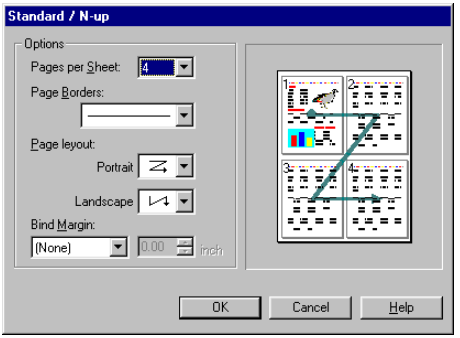
(N-Up Printing)

PCL

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. On the **Setup** tab, under **Finishing Mode**, select the required number of pages per sheet.



5. Click the **Options** button. Select the **Page Borders**, **Page Layout** and **Bind Margin**. Click **OK**.
6. Click **OK**. Print the document.



Custom Page Sizes

PostScript

NOTE

Three custom paper sizes can be defined in the PostScript driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

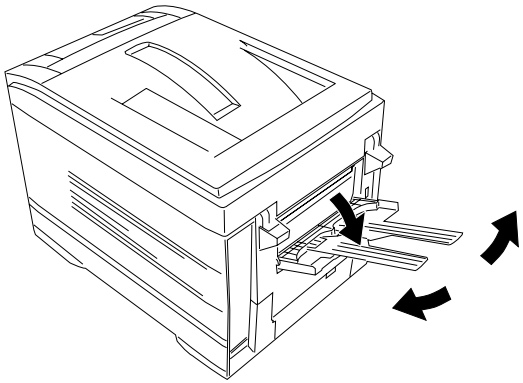
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).

Important!

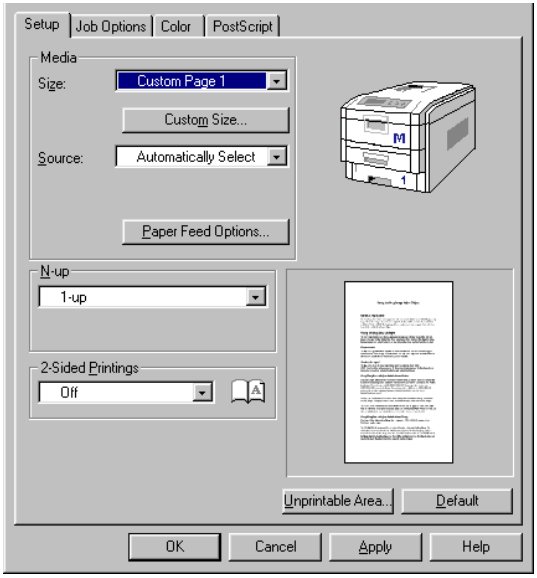
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

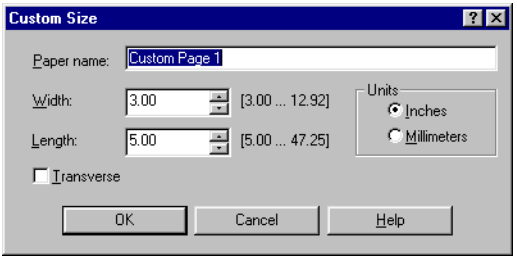
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



4. Click the **Setup** tab. Under **Media**, in the **Size** drop-down list, select **Custom Page 1, Custom Page 2, or Custom Page 3**.



5. Click the **Custom Size** button.



6. In the **Paper name** box, yype in the name you wish to use for the custom paper size.
7. Enter the **Width** and **Length** for the custom paper.
   Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]
8. Select **Transverse** if you wish to rotate the image by 90 degrees.
9. Click **OK**.
10. Check that the name of the custom paper size appears in the **Size** box.
11. Click **OK** to close the Properties dialog box.
12. Print the document

Custom Page Sizes

PCL

NOTE

Up to 32 custom page sizes can be defined in the PCL driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

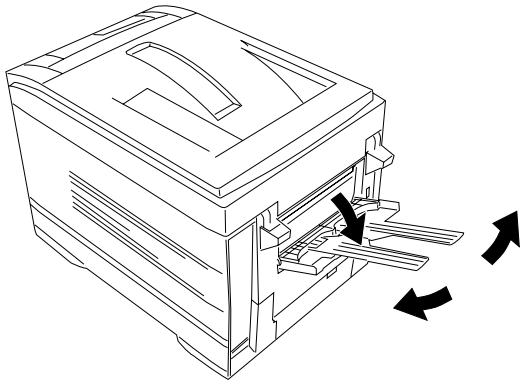
- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

Important!

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.

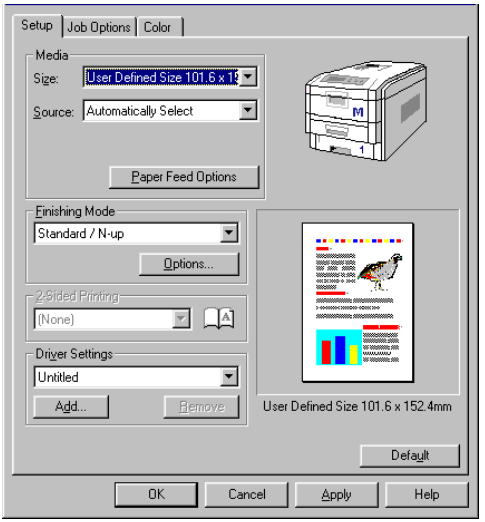


1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Setup** tab. Under **Media**, in the **Size** drop-down list, select **User Defined Size**.
   The Set Free Size dialog box appears.

NOTE

You may see a Warning dialog box indicating a conflict.
If you do, click OK.
The driver automatically corrects for the conflict.

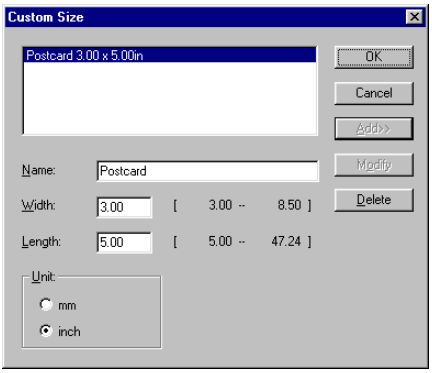
5. Select the unit.
6. Enter the **Width** and **Length** measurements.
7. Click **OK**.
   User Defined Size should appear in the **Size** box on the **Setup** tab.



NOTE

To save the setting for future use:

- **Click Paper Feed Options.**
- **Click Custom Size.**
- **Enter the relevant information for Width and Height.**
- **Give your custom size a name under Name.**
- **Click Add.**



- **Click OK twice.**

The Custom Page Size is added to the bottom of the Paper Size list.

8. Click **OK** to close the Properties dialog box.

9. Print the document.

Print Resolution

PCL or PostScript

Changing for a Print Job

NOTE

To change the settings to apply to all jobs (default settings):

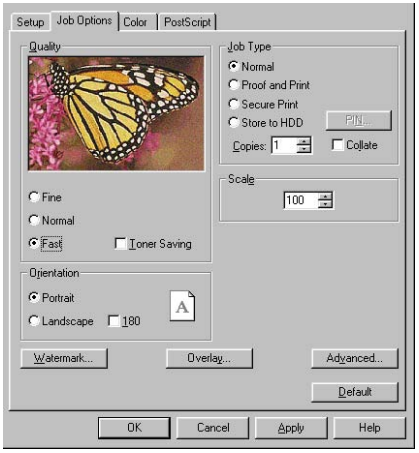
- **Click Start → Settings → Printers.**
- **Highlight the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

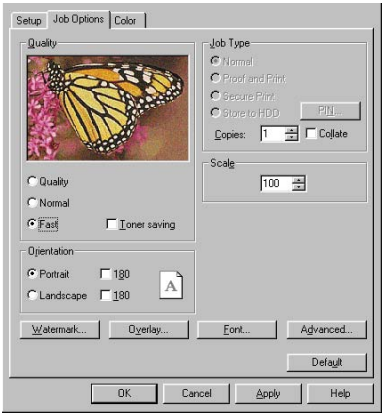
1. Open the file in your application. Select **File → Print**.
2. In the Print dialog box, click the appropriate driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Job Options** tab.

5. Select the required printing resolution under **Quality**.
6. Select **Toner Saving** (if appropriate).
7. Click **OK**. Print the document.

PostScript Driver



PCL Driver



Duplex Printing

(Printing on Both Sides of the Paper)

PostScript or PCL

Usage Restrictions

NOTE

Before you can perform duplex printing, unit must be

- **installed in the printer**

and

- **enabled in the driver.**

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.
- Duplexing cannot be used if Paper Weight is set to Ultra Heavy.

  See Paper (Media), “Weight and Type” on page 58.
- Duplexing cannot be used if White Page Skip is set to ON.

  See “White page skip” on page 90 (PCR Emulation), page 94 (PPR Emulation), and page 98 (FX Emulation).

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers.**
- **Highlight the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

Duplex Printing

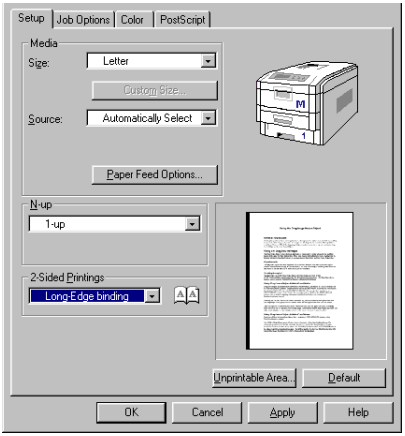
(Printing on Both Sides of the Paper)

PostScript or PCL

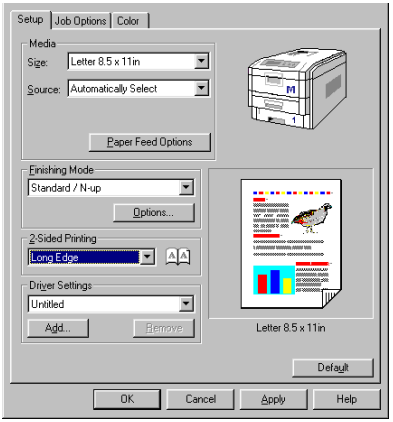
Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. On the **Setup** tab, under **2-Sided printing**, select **Long Edge Binding** or **Short Edge Binding**.
5. Click **OK**. Print the document.

PostScript Driver



PCL Driver



Printing Booklets

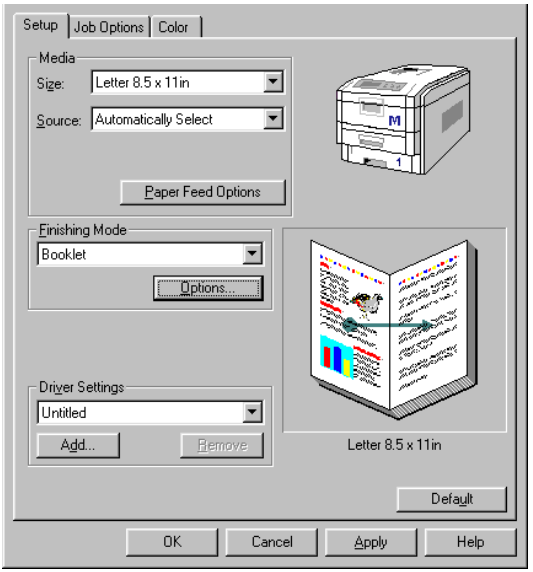
PCL and Windows Me

NOTES

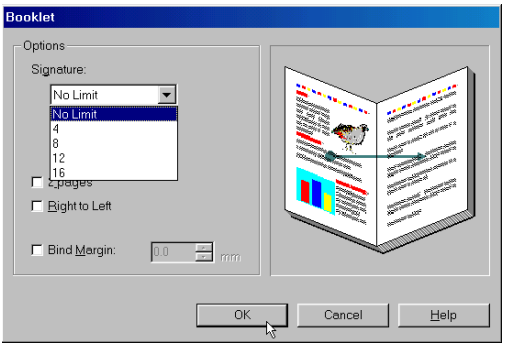
- **Available only in the Windows Me Operating System (not available for Windows 98 or 95).**
- **Available in the PCL printer driver only.**
- **You must have the duplex unit installed and enabled in order to print booklets.**
- **Not available on some network connections: see the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).

4. On the **Setup** tab, under **Finishing Mode**, in the drop-down list, select **Booklet**.



5. Click the **Options** button.
6. Set the **Signature**, **2pages**, **Right to Left**, and **Bind Margin**, as required. See the online Help for information.
7. Click **OK**.

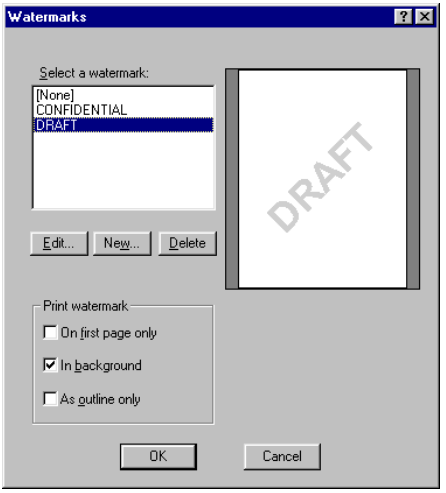


8. Click **OK.** Print the document.

Printing Watermarks

PostScript

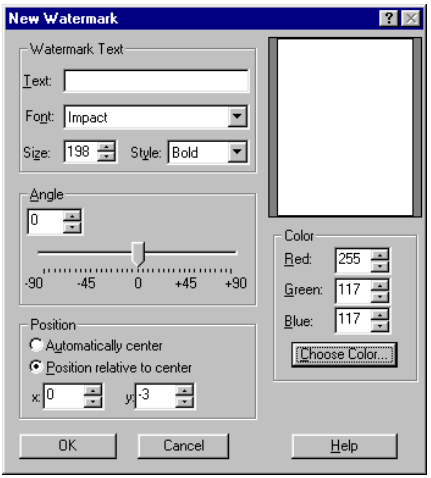
1. Open the file in your application. Select **File** → **Print**.
2. In the print dialog box, click the appropriate PS driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. In the **Select a watermark** list, click the name of the watermark you wish to use.



NOTE

To create a new watermark or edit an existing watermark:

- **Click the New or Edit button.**
- **Enter the text for the watermark. Select the font, size, angle, etc., to be used.**



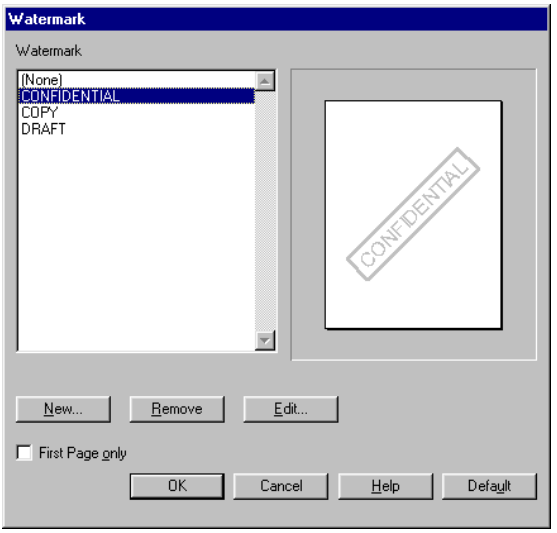
- **Click OK.**

5. Under **Print watermark**, make your selections for how the watermark prints.
6. Click **OK** twice.
7. Print the document.

Printing Watermarks

PCL

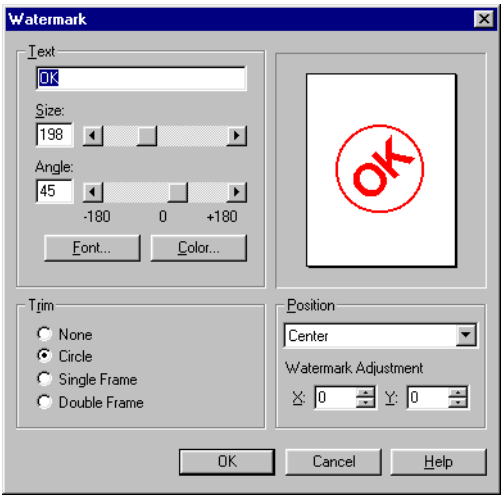
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Job Options** tab. Click **Watermark**.
   The Watermark dialog box appears.
5. Select a name from the **Watermark** list.



NOTE

To create a new watermark or edit an existing watermark:

- **Click the New or Edit button.**



- **Enter the text for the watermark. Select the attributes (font, size, angle) to be used.**
- **Click OK.**

The new watermark appears in the Watermark list.

6. If you wish to print the watermark only on the first page of the document, select **First Page only**.
7. Click **OK** twice.
8. Print the document.

Collating

PCL or PostScript

Collating can be carried out with or without a hard disk drive installed. A printer with a hard disk drive performs better.

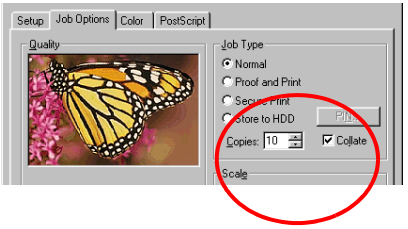
Important

If your software application has a collate option, use it instead of the collate option in the printer driver.

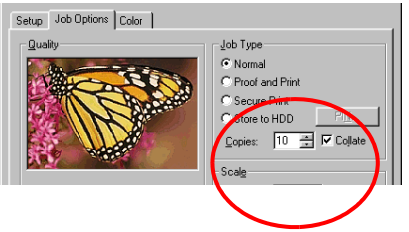
To use the printer driver to select collating:

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Job Options** tab. Under **Job Type**, enter the number of copies required. *Only if the application has no collate option*—select **Collate**.

PostScript Driver



PCL Driver



5. Click **OK**.
6. Print the document.

Font Substitution

PostScript Only

1. Click **Start** → **Settings** → **Printer**.
2. Right click the appropriate PS driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Fonts** tab.
5. Select the type of font substitution from the various options given Use the on-line Help screen for information.

6. Click **OK** to engage the new settings and close the Properties dialog box.

Proof and Print

PCL or PostScript

Using

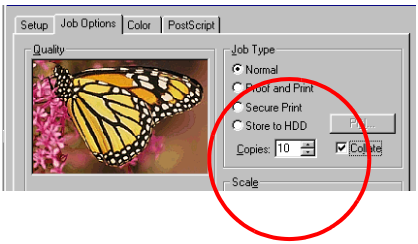
Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

NOTES

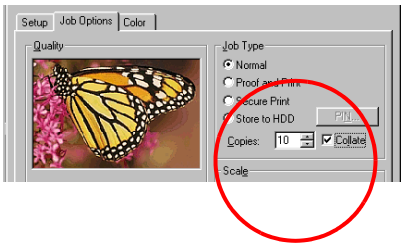
- **The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy is printed.**
- **If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.**
- **Proof and print may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Job Options** tab.
5. Enter the number of copies. If required, select **Collate**.

PostScript Driver



PCL Driver

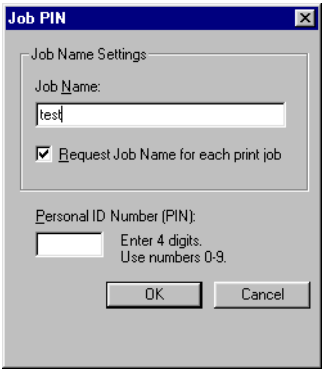


a. Under **Job Type**, select **Proof and Print**.

b. Under **Job Name Setting**, enter a job name of up to 16 characters. If required, select **Request Job Name for each print job**.

PostScript Driver

PCL Driver



c. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

6. Click **OK** to close the Properties dialog box.

7. Print the document. The document is stored on the hard disk drive. One copy is printed for checking.

8. After checking the proof, print or delete (if incorrect) the remaining copies of the document. Use the procedures given below.

Proof and Print

Printing Copies

1. Press the MENU button to access the **PRINT JOBS MENU**. Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the remaining copies of the document.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Proof and Print

Deleting Copies

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Secure Printing

(Printing Confidential Documents)

PCL or PostScript

Using Secure Printing

Secure printing (printing with passwords) allows you to print confidential documents on printers that are shared with other users in a network environment.

NOTE

- **The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.**
- **Secure printing may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. On the **Job Options** tab, enter the number of copies. If required, check the **Collate** box.
5. Under **Job Type**, select **Secure Print**.

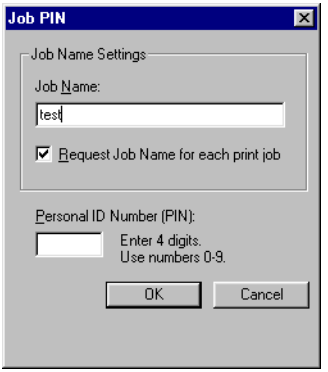
NOTE

If you've already used Secure Print to place a document on the hard disk drive, but have not yet printed it out, click the PIN button and enter a new job name.

6. Under **Job Name**, enter a job name of up to 16 characters. If required, select **Request Job Name for each print job**.

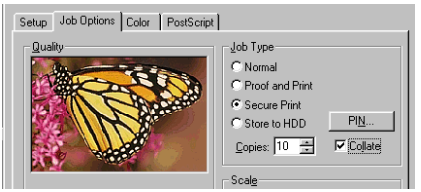
PostScript Driver

PCL Driver

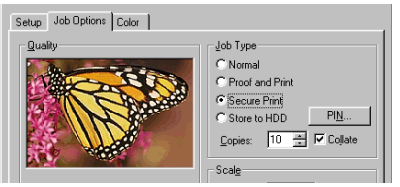


7. Type in a four digit personal ID number from 0000 to 7777.
8. Click **OK**.
9. Enter the number of copies.
10. If required, select **Collate**.

PostScript Driver



PCL Driver



11. Click **OK** to close the Properties dialog box.
12. Print the document. The document is stored on the printer's hard disk.
13. Go to the printer. Use the front panel to print the document. See below.

Secure Printing

(Printing Confidential Documents)

Printing at the Printer

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button.
   The document prints and is deleted from the hard disk drive.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Secure Printing

(Printing Confidential Documents)

Deleting the confidential document before printing it

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the job from the printer.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

PCL or PostScript

Storing a Document

Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead, stationery, etc.

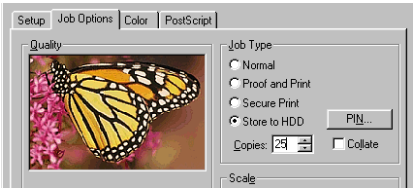
NOTE

- **The internal hard disk must be installed in the printer and enabled.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.**
- **Store to Hard Disk may not be available in some software applications.**

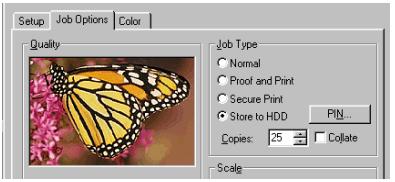
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).

4. Click the **Job Options** tab. Under **Job Type**, select **Store to HDD**.

PostScript Driver



PCL Driver



NOTE

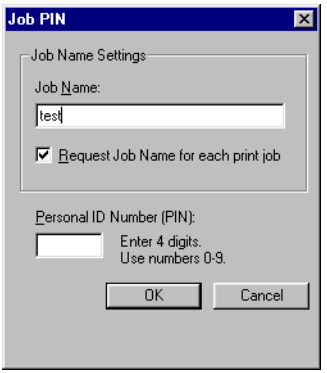
If you've already stored a document on the printer's hard disk drive, and want to store another one, click the PIN button and enter a new Job Name.

5. Under **Job Name Setting, e**nter a job name of up to 16 characters**.**

If required, select **Request Job Name for each print job**.

PostScript Driver

PCL Driver



6. Type a four digit personal ID number from 0000 to 7777.
7. Click **OK**.
8. Select the number of copies. Click **Collate**, if applicable.
9. Click **OK** to close the Properties dialog box.
10. Click **OK**.
11. Click **Print**. The document is stored on the hard disk. It can then be printed on demand, or deleted. Use the procedures given below.

Hard Disk Drive

Printing a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the document.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

Deleting a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Overlays

What are Overlays?

An overlay can be a combination of graphics, fonts, or text that is stored in the printer's flash memory or on the hard disk (supplied on some models, optional on others), and printed whenever required. The result is similar to the Watermark feature, but with the ability to be much more elaborate.

Overlays can be useful for tasks such as printing letterheads, forms, or invoices, and should reduce the need for pre-printed stationery.

Example of Using Overlays

Suppose that you used the Storage Device Manager to create and store three files in the printer:

- the company logo
- the company address
- the company mission statement.

The Overlay feature allows these files to be incorporated into your document in various combinations, depending on your requirements.

Creating Overlays

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead).
2. Use the printer driver to generate a PRN file (print file).
3. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format.
4. Download the storable file to the printer.

Once someone has set up all the necessary overlay files on the printer, other users only have to switch on the required settings in the printer driver to use the overlays.

NOTE

- **The internal hard disk must be installed in the printer to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for overlay to operate correctly.**
- **An overlay may consist of more than one component file.**

Creating documents to use as overlays

PCL

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

To create a print (PRN) file:

1. Open your application program. Open the file to be stored as an overlay. Choose **File,** then **Print**.
2. Make sure that the "**Print To File**" option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model.
4. Click **Properties**. This should open the printer driver settings.

Important

You must use the Oki PCL driver to do this.

5. Choose all of the printer driver settings with which you would like your overlay to print.
6. Try to keep the overlay to a single sheet. Don't use N-up, duplex, finisher options, etc. when creating an overlay. These can be added when printing the document that includes the overlay.
7. Click **OK** to close the Properties dialog box.
8. Click **Print**.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as "my template.prn."

Creating documents to use as overlays

PostScript

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

1. Open your application program. Open the file to be stored as an overlay. Choose **File,** then **Print**.
2. Make sure that the **Print To File** option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model. Then click **Properties...** This should open the printer driver settings.
4. Select the **Job Options** tab. Click the **Overlays...** button.
5. Choose **Create Form** from the menu.
6. Click **OK** to close the Properties dialog box.
7. Click **OK** to print the document to a file.
   Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
   Give the file a meaningful name such as “my template.prn.”

Important

You must use the Oki PostScript driver to do this.

Downloading the print file to use as an overlay

In the previous topic, you created a print (PRN) file on your PC's hard disk. This topic explains how to use the Storage Device Manager to download this file to the printer.

The Storage Device Manager software is included with the original software CDs that were supplied with your printer.

1. Launch Storage Device Manager. Allow the program to discover (locate) the printer.
2. Click **Project**, then **New Project**.
3. From the **Project** menu, select **Add File to Project**.
4. Select the PRN file(s) that you created earlier.
   PCL: This automatically generates a BIN file.
   PostScript: This automatically generates a PostScript hst file.

Important!

The BIN file is automatically assigned an ID number.

To change the ID number

- double-click the number
- enter a new one in the ID field.

5. Note the name that the file is assigned in the Storage Device Manager. *Names are case sensitive*.

NOTE

The assigned file name is very important! You must use this ID number or name when creating overlays in the printer driver. You should change the ID number or name from the default value. *Note the new name for later use*.

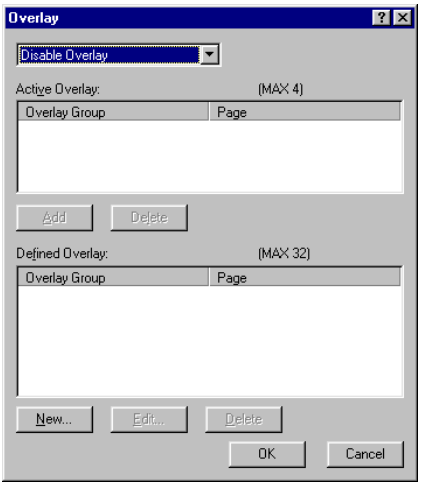
6. Make sure the printer being used is highlighted in the lower window of the Storage Device Manager.

7. Select the **Project** menu. Choose **Send Project Files to Printer**.
   This downloads the file to the printer.
   If the file was downloaded successfully, "Command Issued" displays.
8. Close the Storage Device Manager.

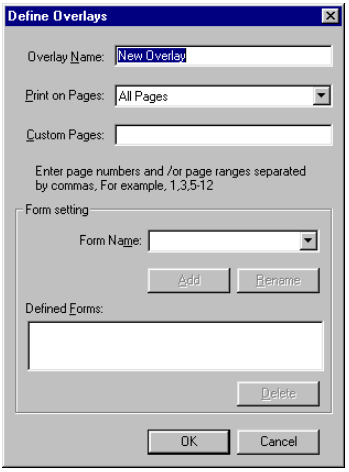
Defining Overlays

PostScript

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**..
3. Click the **Job Options** tab.
4. Click the **Overlay** button.



5. Click the **New** button.

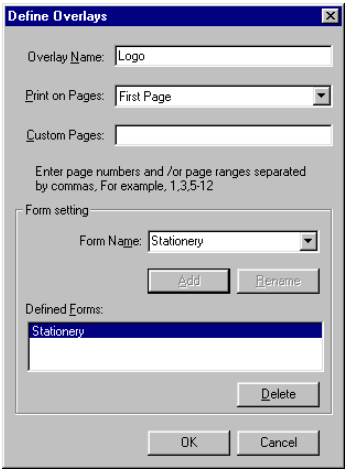


6. In the **Overlay Name** list, enter the file name of the overlay. Select the pages where you want the overlay to print.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printers' hard disk drive. It is case sensitive.

7. Under **Form setting**, in the drop-down list, enter or select a form name. Click **Add.**

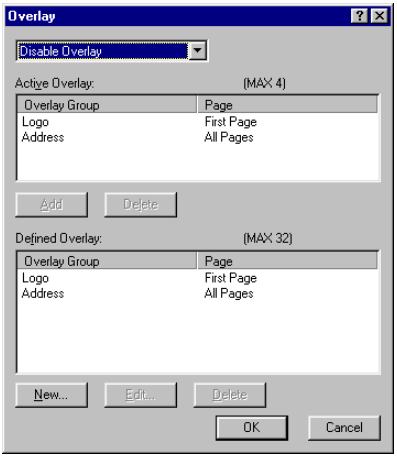


NOTE

The Form Name is a random name of your selection.

8. Click **OK**.
9. To continue to add files to the overlay (if required), repeat steps 5 through 8.

10. Under **Defined Overlay**, highlight the overlay name(s). Click **Add** to add the overlay(s) to the list under Active Overlay. To select more than one overlay, hold the CTRL key while clicking on each name.

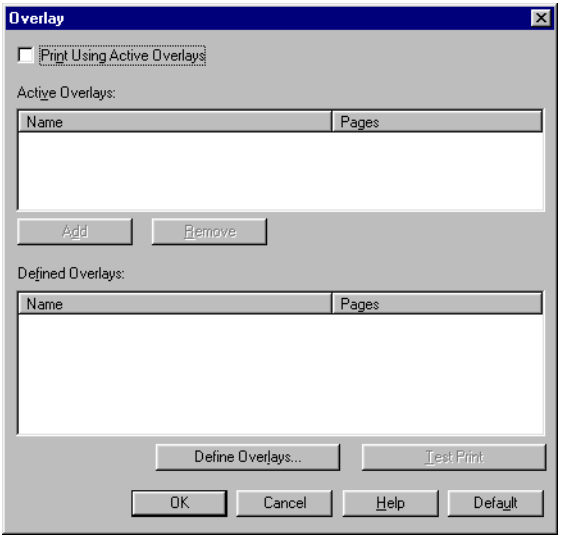


11. At the top of the dialog box, use the drop-down list to select **Use Overlay**. Click **OK**.
12. Click **OK** to close the Properties dialog box.

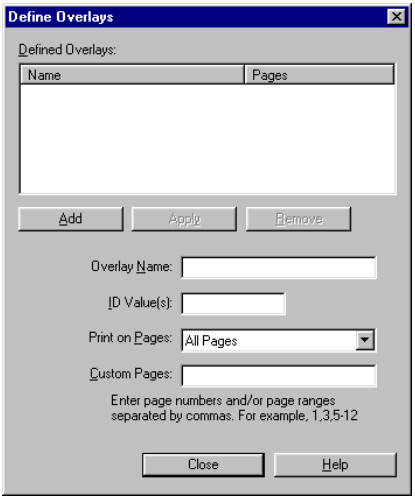
Defining Overlays

PCL

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **File**. Click **Properties**..
3. Click the **Job Options** tab.
4. Click the **Overlay...** button.



5. To define an overlay, click the **Define Overlays** button.



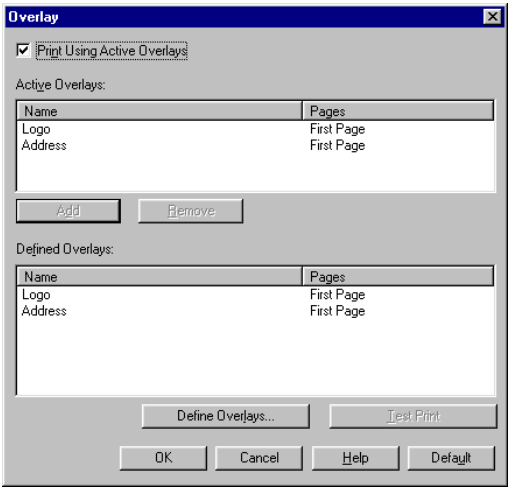
6. In the **Overlay Name** list, enter the file name of the overlay

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printer's hard disk drive. It is *case sensitive*.

7. In **ID Values, e**nter the ID of the file. Please refer to the instructions for the Storage Device Manager utility.
8. Select which pages the overlay is to be printed on from **Print on Pages** or use **Custom Pages** to select specific page numbers in the document. Click **Add**.
9. Click **Close**.
10. Under **Defined Overlay**, highlight the overlay name. Click the **Add** button to add the overlay to the list in **Active Overlays**.

11. Select **Print Using Active Overlays**.



12. Click **OK**.

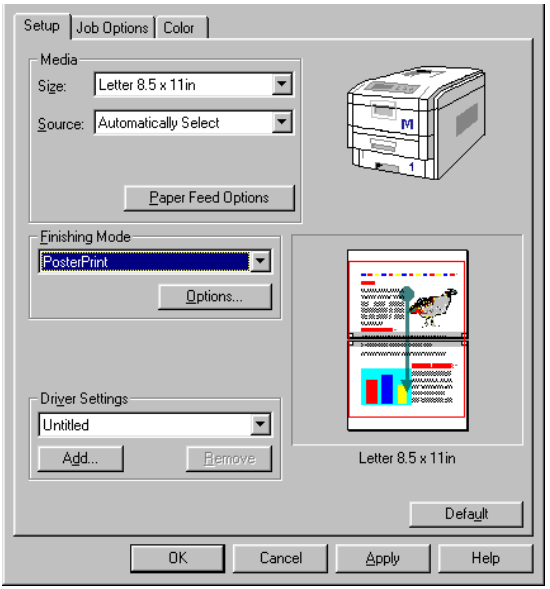
13. Click **OK** to Close the Properties dialog box.

Printing Posters

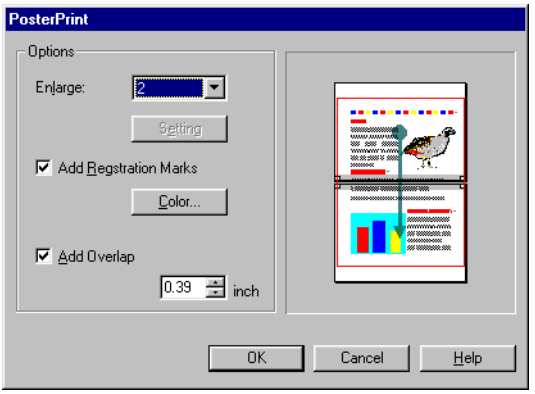
PCL Only

This option allows you to configure and print posters by breaking up the document page into multiple pieces. Each piece prints, enlarged, on a separate sheet. Then, the separate sheets are combined to produce a poster. It is only available with the PCL printer driver.

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver.
3. Click **Properties** (or **Setup**, or your application's equivalent).
4. Click the **Setup** tab. Under **Finishing Mode**, select **Poster Print**.



5. Click **Options...** and enter the configuration details.



6. Click **OK** twice.
7. Click **OK**. Print the document.

Windows NT Printer Drivers

See your printed *Software Installation Guide* for information on installing printer drivers.

You can also go to **http://my.okidata.com** to view and/or download a copy of the *Software Installation Guide* or for the latest information on drivers for your printer.

Which Printer Driver to Use?

Your printer comes with Windows drivers for PCL and Adobe® PostScript® (PS). You can install either of these, or both if you wish. Which driver you choose depends on your application.

- If you use TrueType fonts and you do not print PostScript (including ".eps" files) graphics, choose the PCL driver. This is more efficient and give good results.
- If you use PostScript fonts or print PostScript graphics, choose the PostScript driver. In this situation, performance is faster and graphics are printed at their best quality.

NOTE

The line art graphics in this manual are PostScript. If you plan to print parts of this manual, choose the PostScript driver. Otherwise, the line art graphics print at low resolution. The print quality may not be satisfactory.

If neither driver seems to cover all your needs, you should install both drivers. Select the same printer port (LPT1 or Network Port) for both drivers during the installation.

Set the driver you plan to use most of the time to be your Windows default driver. Most applications allow you to choose a different printer from within the print dialog, so you can use the alternative driver for printing whenever you need to.

Memory: Enabling

PostScript Only

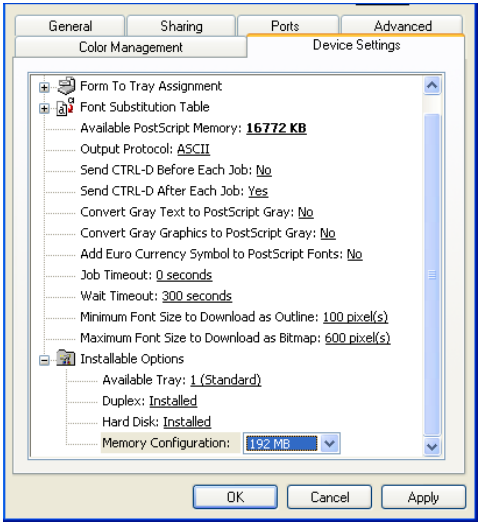
Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

If you have additional memory in your printer, use these instructions to update the Windows PostScript driver so that it recognizes the additional memory:

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, click **Memory Configuration.**
5. Set the memory in the **Change 'Memory Configuration' Setting** list to match what is now installed in the printer, as shown in the Menu Map.

   To print the Menu Map, see "Printer Settings (Menu Settings)" on page 70.
6. Click **OK**. Close the Printers dialog box.



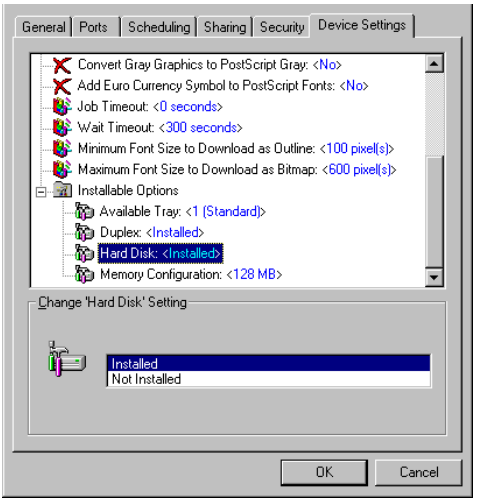
Hard Disk Drive: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, make sure the **Hard Disk** is **Installed**.
5. Click **OK**. Close the Printers dialog box.



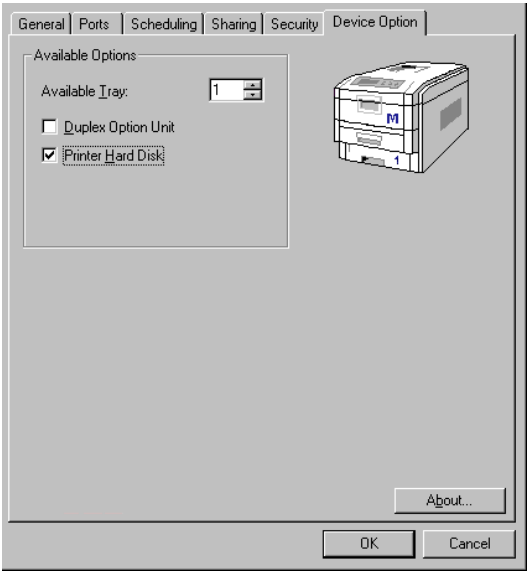
Hard Disk Drive: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. On the **Device Option** tab, click **Printer Hard Disk**.
4. Click **OK**. Close the Printers dialog box.



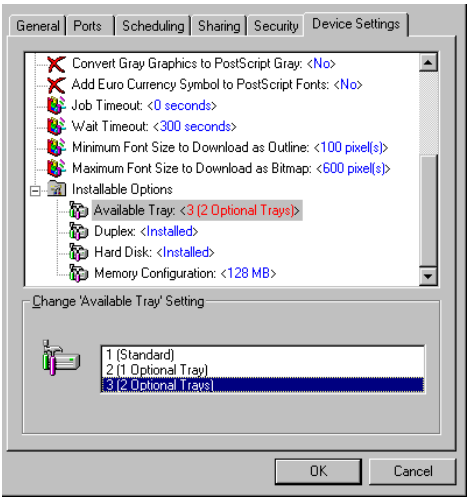
Paper Trays: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, click **Available Trays**
5. Select the appropriate number of trays (not including the Multi-purpose tray) from the **Change 'Available Tray' Setting** list.
6. Click **OK**. Close the Printers dialog box.



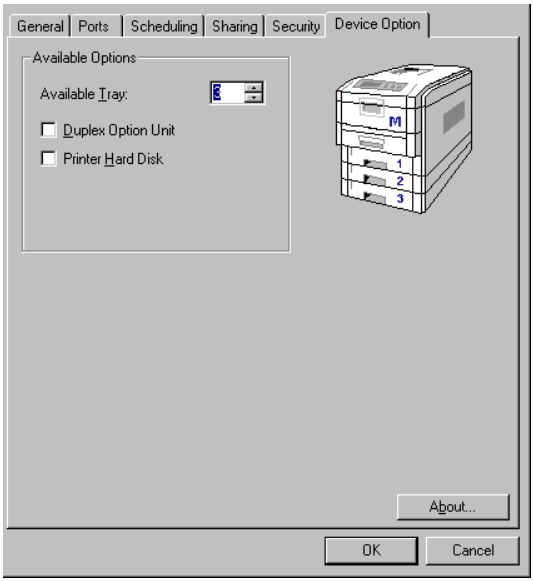
Paper Trays: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. On the **Device Option** tab, select the appropriate number of trays (not including the Multi-purpose tray).
4. Click **OK**. Close the Printers dialog box.



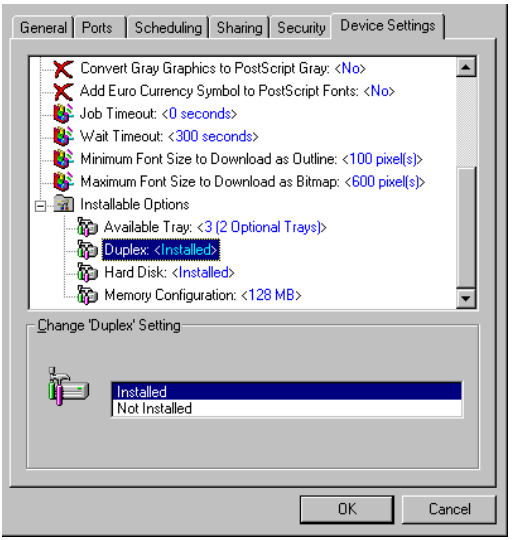
Duplex Unit: Enabling

PostScript

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Settings** tab.
4. Under **Installable Options**, make sure the **Duplex** is **Installed**.
5. Click **OK**. Close the Printers dialog box.



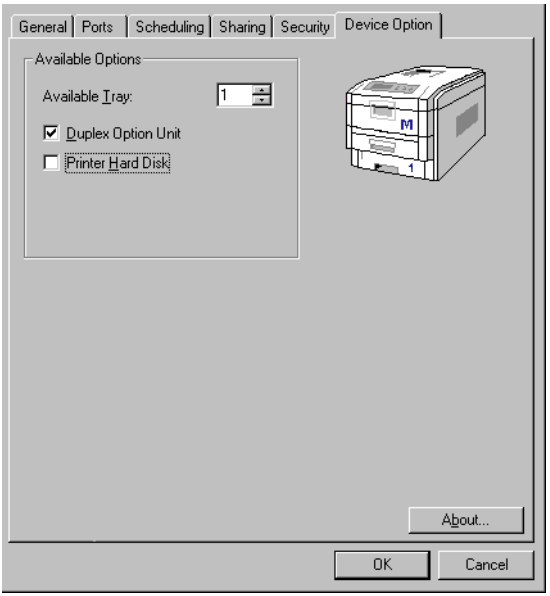
Duplex Unit: Enabling

PCL

Certain options such as additional memory, the duplexer, or additional trays may be installed in your printer.

Before using the printer, you must enter the printer driver(s) and enable the options. You only need to do this once.

1. Click **Start** → **Settings** → **Printers**.
2. Highlight the printer name. Click **File** then **Properties**.
3. Click the **Device Option** tab, click **Duplex Option Unit**.
4. Click **OK**. Close the Printers dialog box.



Paper Feed, Size and Media

Changing Defaults

PostScript

The normal default for these items is automatic detection.

NOTE

If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

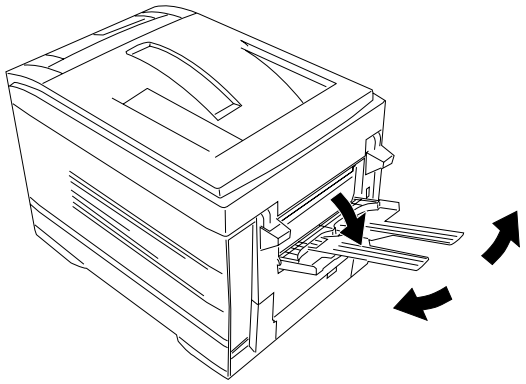
1. Click **Start** → **Settings** → **Printers**.
2. Right click the printer name. Click **Document Defaults**.

Important!

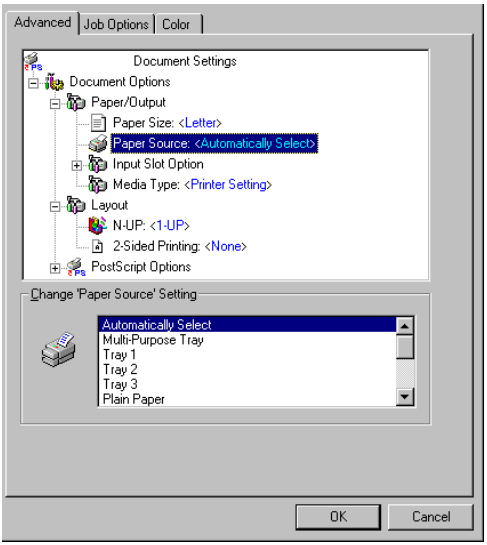
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

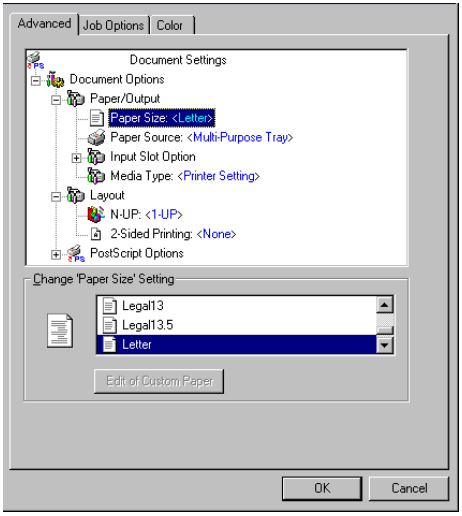
- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



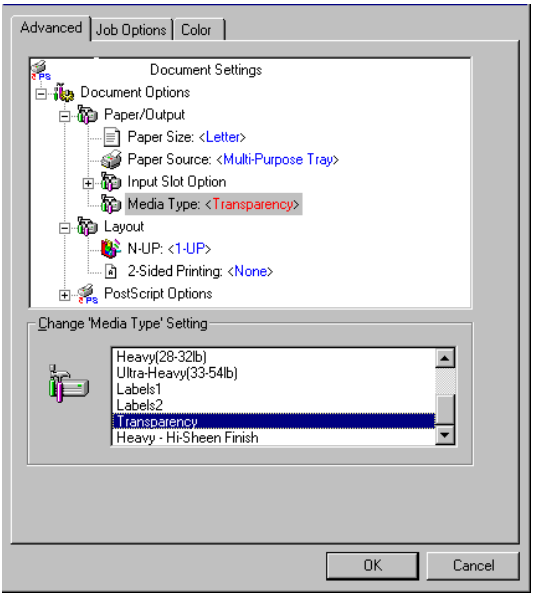
3. On the **Advanced** tab, under **Document Options** → **Paper/Output**, click **Paper Source**.
4. Select the paper feed in the **Change 'Paper Source' Setting** list.



5. Click **Paper Size**.
6. Select the size in the **Change 'Paper Size' Setting** list.



7. Click **Media Type.**
8. Select the media from the **Change 'Media Type' Setting** list.
9. Click **OK**. Close the Printers dialog box.



Paper Feed, Size and Media

Changing Defaults

PCL

The normal default for these items is automatic detection.

NOTE

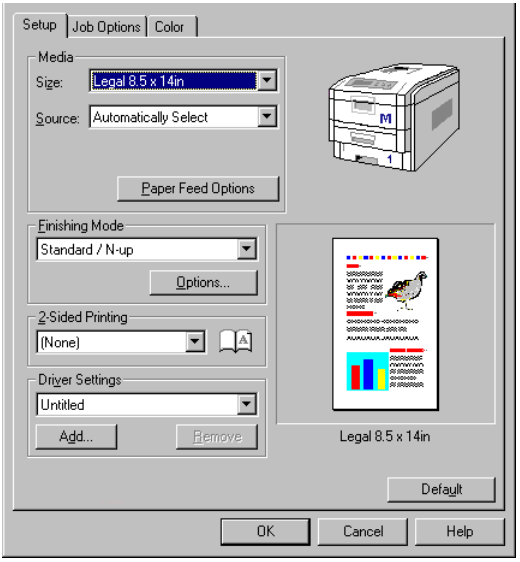
If the settings in the printer differ from those selected on your computer, the printer does not print.

An error message displays.

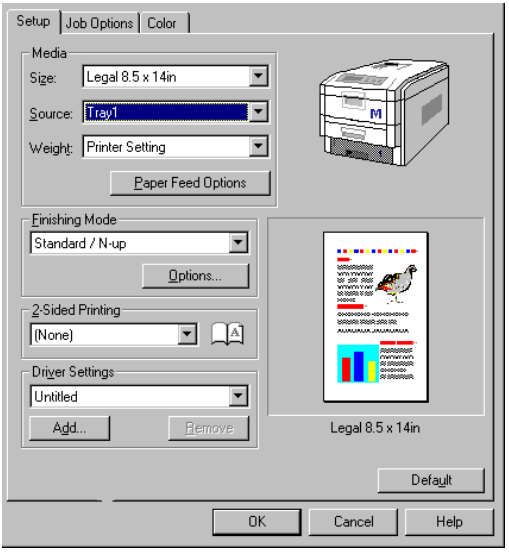
The following printer driver instructions are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the software (under Page Setup).

1. Click **Start** → **Settings** → **Printers**.

2. Right click the printer name. Click **Document Defaults**.
3. On the **Setup** tab, under **Media**, select the required paper size in the **Size** drop-down list.



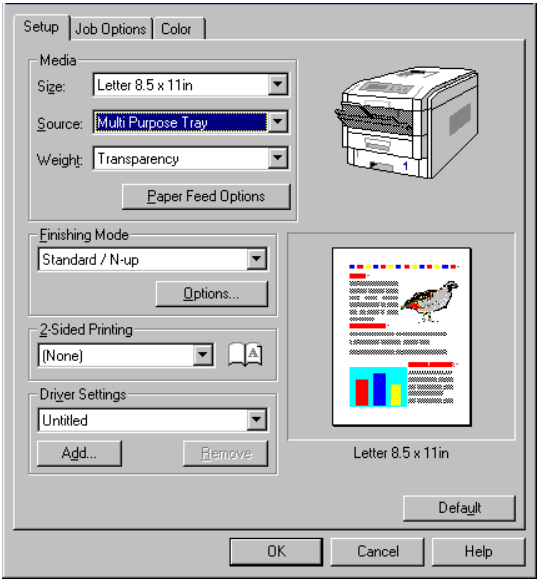
4. Select the required paper feed under **Source**.



NOTE

If a paper tray is selected, the Weight field becomes visible.

5. Select the required paper type under **Weight**.



NOTE

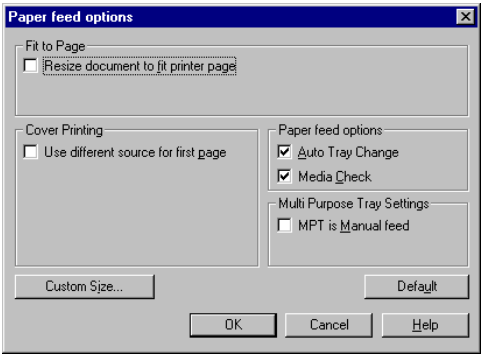
If Printer Setting is selected, make sure the printer has been set to the correct media type.

A Warning may appear (indicating a setting conflict),

If it does, click OK.

The driver automatically corrects the problem.

6. Click the **Paper Feed Options** button.
7. Make any other selections.
8. Click **OK**.



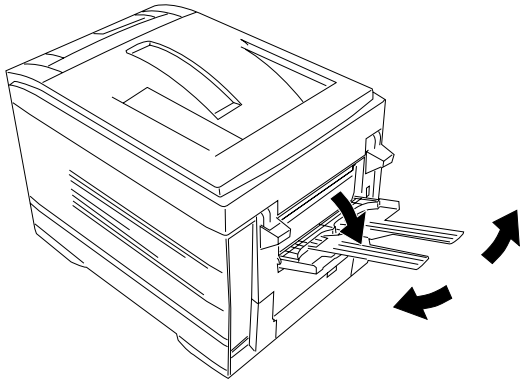
9. Click **OK** twice. Close the Printers dialog box.

Important!

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



Network Printer Status Utility

- Available on TCP/IP network connection only.

The Network Printer Status utility is available if your administrator has installed it. The printer driver **Properties** dialog box changes:

- a new **Status** tab is added.
- an **Option** button is added to the **Device Option** tab.

This utility allows you to view (but not change) the status of the following on the **Status** tab:

- paper trays installed and the media assigned to them.

- total size and percentage used of disk/memory.
- percentage of toner remaining.

Important!

If you select **Automatic Status Update** in the **Status** tab, the driver automatically pings the printer for the latest status information every time you open the **Properties** dialog box.

This causes a significant delay until the Properties dialog box opens.

To avoid this, use the **Update Status** button in the **Status** tab to manually update the information on demand.

Windows NT 4.0 Operation

NOTE

Most applications allow the printer properties to be accessed from within the document print dialog box.

This section explains how to set up color printing and how to use the printer's features.

Printer's features covered in this section include:

- N-up printing (see page 427)
- Custom page sizes (see page 430)
- Selecting print resolution (see page 440)
- Duplex printing (see page 442)
- Printing Booklets (see page 446)
- Watermarks (see page 448)
- Collating (see page 450)
- Proof and Print (see page 451)
- Secure print: printing confidential documents (see page 455)
- Storing files to the hard disk drive (see page 459)
- Using overlays (see page 464)
- Printing posters (see page 479)

Factors that Affect Color Printing

The PCL and PostScript printer drivers supplied with your printer provide several controls for changing the color output. For general use the default driver settings produce good results for most documents.

Many applications have their own color settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's color management functions.

If you wish to manually adjust the color settings in your printer driver, please be aware that *color reproduction is a complex topic, and there are many factors to take into consideration*.

Some of the most important factors are

- the differences between the range of colors a monitor can reproduce versus the range of colors that a printer can reproduce
- viewing conditions
- printer driver color settings
- monitor settings
- how your software application displays color
- paper type

Factors that Affect Color Printing

Monitor Colors vs. Printer Colors

(Differences between the range of colors a monitor or printer can reproduce)

- Neither a printer nor a monitor is capable of reproducing the full range of colors visible to the human eye. Each device is restricted to a certain range of colors. In addition to this, a printer cannot reproduce all of the colors displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent color. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Yellow, Magenta and Black (CMYK) toner or ink.
- A monitor can display very vivid colors such as intense reds and blues. These cannot be easily produced on any printer using toner or ink. Similarly, there are certain colors, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colors do not match the colors displayed on screen.

Viewing Conditions

A document can look very different under various lighting conditions. For example, the colors may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

Printer Driver Color Settings

The driver settings for Manual color can change the appearance of a document. There are several options available to help match the printed colors with those displayed on screen. These options are explained in subsequent sections of this User Manual.

Factors that Affect Color Printing

Monitor Settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor color temperature influences how "warm" or "cool" the colors look.

NOTE

Several of the Color Matching options make reference to your monitor's Color Temperature. Many monitors allow you to adjust the color temperature through their control panels.

There are several settings found on a typical monitor:

- **5000k***

  Warmest; yellowish lighting, typically used in graphics arts environments.

- **6500k***

  Cooler; approximates daylight conditions.

- **9300k***

  Cool; the default setting for many monitors and television sets.

*k = degrees Kelvin, a measurement of temperature

Factors that Affect Color Printing

How your Software Application Displays Color

Some graphics applications such as CorelDRAW® or Adobe® Photoshop® may display color differently from "office" applications such as Microsoft® Word. Please see your application's online help or user manual for more information.

Paper Type

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

Color Matching

Choosing a Method

NOTE

These suggestions are for guidance only. Your results may vary depending on the application from which you are printing. Some applications override, without warning, any color matching settings in the printer driver.

There is no one way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible color.

However, the following guidelines may help in achieving good color output from your printer.

There are several suggested methods, depending on the type of document you are printing.

- most common [RGB] (see page 413)
- professional desktop publishing and graphics [CMYK] (see page 413)
- photographic images (see page 414)
- specific colors (i.e., a company logo) (see page 415)
- printing vivid colors (see page 416)

Color Matching

Choosing a Method

RGB or CMYK?

The guidelines for choosing a color matching method make distinctions between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Black (CMYK).

Generally, most documents you print are in RGB format. This is the most common, and, if you do not know your document's color mode, assume that it is RGB.

Typically, CMYK documents are only supported in professional Desktop Publishing and Graphics applications.

Color Matching

Choosing a Method

Matching Photographs

RGB only

Oki Color Matching (see page 423) is a generally a good choice. Select a matching method appropriate to your monitor.

Color Matching

Choosing a Method

Matching Specific Colors
(Example: Company logo)

RGB only

- Oki Color Matching (see page 423), and the sRGB setting: PCL or PS driver.
- PostScript Color Matching using the Absolute Colorimetric option (see page 425).
- Use the Color Swatch Utility to print out a chart of RGB swatches and enter your desired RGB values in your application's color picker—PS only (see page 420).

RGB or CMYK

- If you are printing from a graphics application such as Adobe Photoshop, use PostScript Color Matching with the Absolute Colorimetric Setting (see page 425).

Color Matching

Choosing a Method

Printing Vivid Colors

RGB only

Use Oki Color Matching (see page 423), with the Monitor 6500k Vivid, sRGB or Digital Camera settings (PCL or PS).

RGB or CMYK

Use PostScript Color Matching (see page 425) with the Saturation option.

Color Matching

Color Matching Options

PCL Driver

The Color Matching Options in the PCL driver can be used to help match your printed colors to the ones displayed on your monitor.

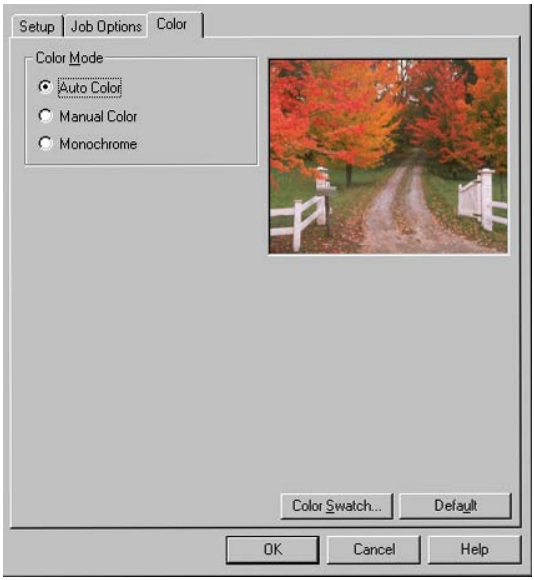
NOTE

The PCL driver's color options are only designed to work with RGB data.

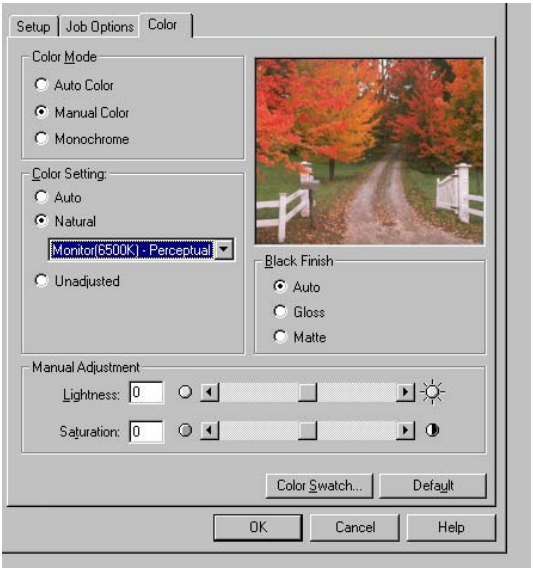
If you are printing CMYK data, we recommend you use the PostScript driver.

Manually set the options in the PCL driver:

1. Click **Start** → **Settings** → **Printers.**
2. Right click the appropriate printer name. Click **Document Defaults**.
3. Click the **Color** tab.



4. Under **Color Mode,** click **Manual Color**.
5. Under **Color Setting**, click **Natural**.



6. Select the method you wish to use:

   Monitor (6500k) Perceptual

   Optimized for printing photographs when using a monitor with a color temperature of 6500K.

   Monitor (6500k) Vivid

   Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics.

   Monitor (9300k)

   Optimized for printing photographs when using a monitor with a color temperature of 9300K.

   Digital Camera

   Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

   sRGB

   Optimized for matching specific colors, such as a company logo color. The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.
7. Set any other required parameters. Use the on-line Help for guidance.
8. When you are done, click **OK**. Close the Default dialog box.

Color Matching

Color Matching Options

Print Color Swatch Utility

For use with applications which allow you to set your own RGB values for colors.

The Color Swatch utility prints out charts of sample colors. Listed below each color are the corresponding RGB (Red, Green, Blue) values to use in your application to match that printed color.

An example of using the Print Color Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

1. Click **Start** → **Settings** → **Printers.**
2. Right click the printer name. Click **Document Defaults**.
3. Click the **Color** tab.
4. Click the **Color Swatch** button to print the color swatch samples.
5. Select the shade of red that best suits your needs and make a note of the RGB value below that particular shade.
6. Use your program's color picker to enter the same RGB values (from step 5). Change the logo to that color.

NOTE

The RGB color displayed on your monitor may not necessarily match what was printed on the color swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce color.

Color Matching

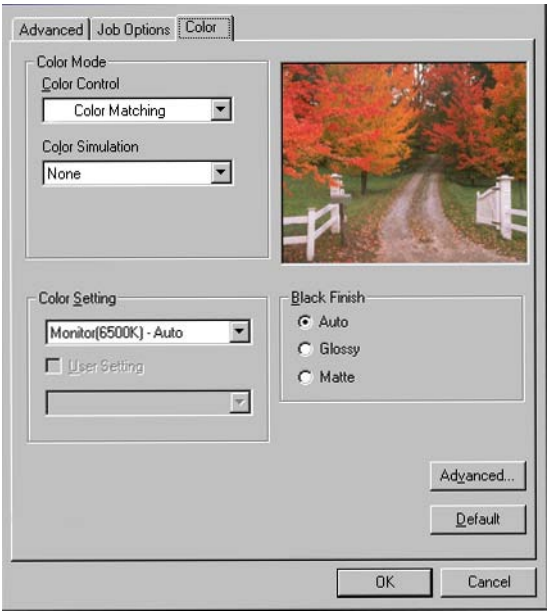
Color Matching Options

PostScript Driver

The PostScript driver offers several different methods of controlling the color output of the printer.

Setting Options Manually

1. Click **Start** → **Settings** → **Printers.**
2. Right click the printer name. Click **Document Defaults**.
3. Click the **Color** tab.



4. Under **Color Mode**, use the drop-down list to select one of the following **Color Control Method**s:

   a. OKI Color Matching

   This is OKI's proprietary color matching system, and affects *RGB data only*. See "OKI Color Matching" on page 423.

   b. PostScript Color Matching

   This uses PostScript Color Rendering Dictionaries built into the printer, and affects both RGB and CMYK data. See "PostScript Color Matching" on page 425.

   c. No Color Matching

   Use this option to switch off all printer color matching. No color correction occurs when selected. This option is beneficial when other matching regimens are used, specifically if you select a Color Simulation option.

   d. Print in Grayscale

   This option prints all documents as monochrome. No color prints. The printer interprets all colors as a variation of grays.

Color Matching

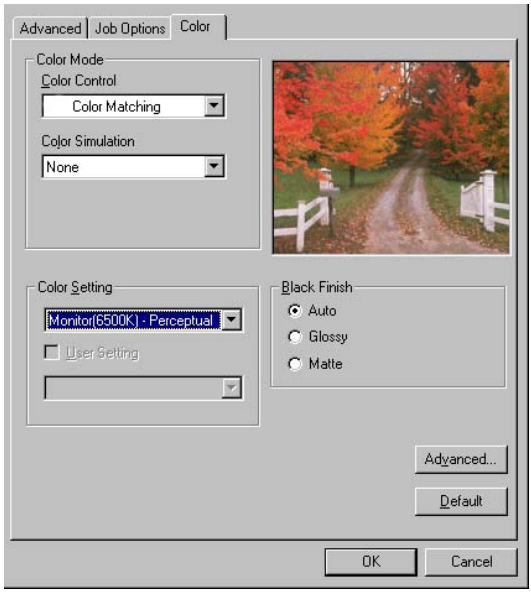
Color Control Method

OKI Color Matching

PostScript

This is OKI's proprietary color matching system. It affects *RGB data only*. This is the default setting. It provides the fastest, best color matching for your printer.

Under **Color Setting,** use the drop-down list to select the type to be used:



Color Matching

Color Control Method

OKI Color Matching

PostScript

Color Settings

Monitor (6500k) Perceptual

Optimized for printing photographs when using a monitor with a color temperature of 6500K. This is best for printing photographic images.

Monitor (6500k) Vivid

Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Ideal for office graphics and text. Vivid or Digital Camera settings produce brightest colors.

Monitor (9300k)

Optimized for printing photographs when using a monitor with a color temperature of 9300K.

Digital Camera

Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken. Vivid or Digital Camera settings produce brightest colors.

sRGB

Optimized for matching specific colors, such as a company logo color. This option attempts to simulate RGB color.

The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.

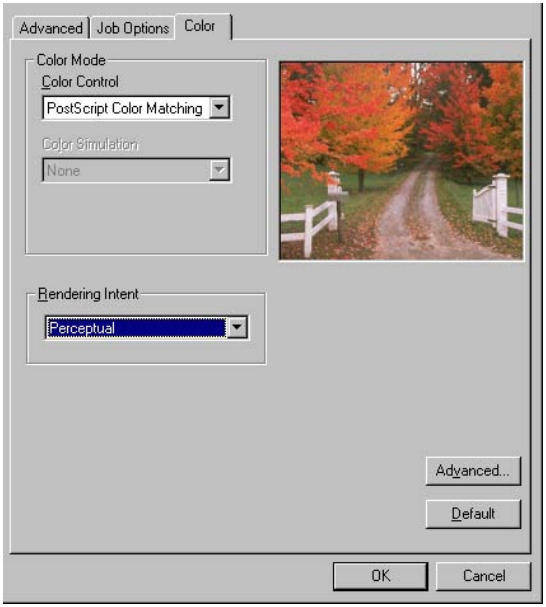
Color Matching

Color Control Method

PostScript Color Matching

This uses PostScript Color Rendering Dictionaries built into the printer. It affects both RGB and CMYK data.

From the **Rendering Intent** drop-down list, select the rendering type.



Color Matching

Color Control Method

PostScript Color Matching

Rendering Intents

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

The printer driver provides the rendering intents listed below:

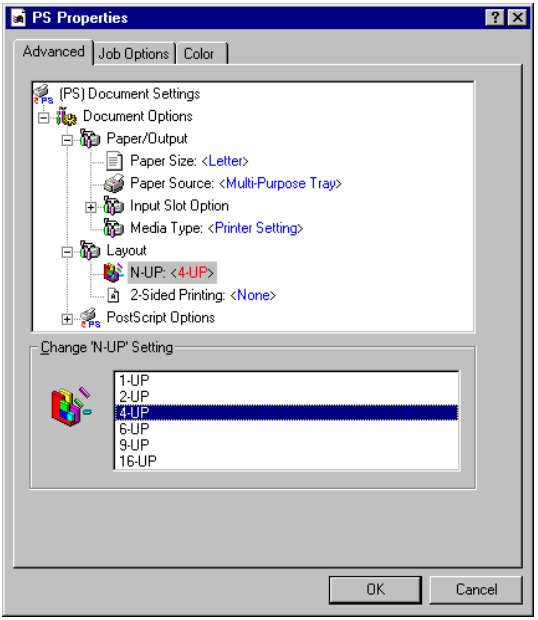
- *Auto*
  Best choice for printing general documents.
- *Perceptual*
  Best choice for printing photographs. Compresses the source gamut into the printer's gamut while maintaining the overall appearance of an image. This option attempts to simulate RGB color.
- *Saturation*
  Best choice for printing bright and saturated colors if you don't necessarily care how accurate the colors are. This makes it the recommended choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.
- *Relative Colorimetric*
  Good for proofing CMYK color images on a desktop printer. Much like Absolute Colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute Colorimetric, Relative Colorimetric attempts to take the paper white into account.
- *Absolute Colorimetric*
  Best for printing solid colors and tints (such as Company logos). Matches colors common to both devices exactly. Clips the out of gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

Printing Multiple Pages on One Sheet

(N-Up Printing)

PostScript

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Advanced** tab, under **Document Options** → **Layout**, click **N-UP**.
4. In the **Change 'N-UP' Setting** list, select the number of pages per sheet,
5. Click **OK**. Print the document.

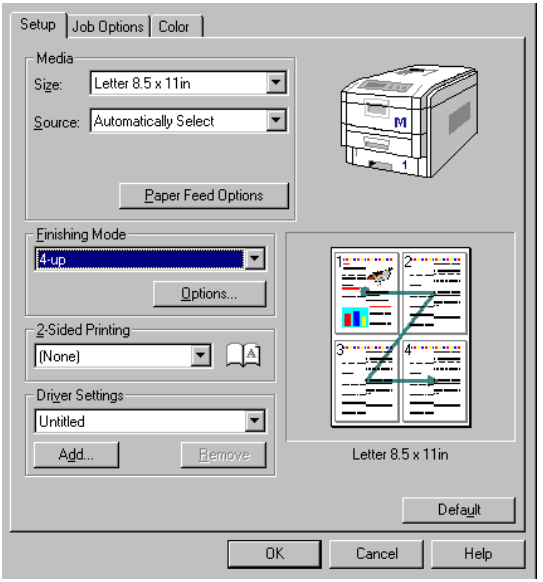


Printing Multiple Pages on One Sheet

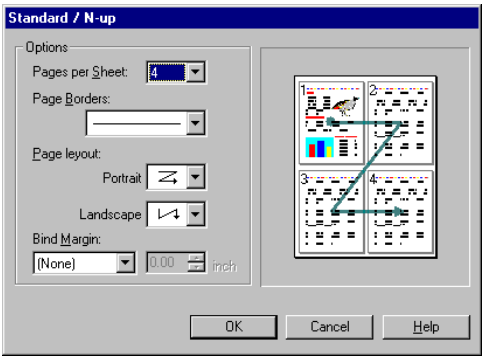
(N-Up Printing)

PCL

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Setup** tab, under **Finishing Mode**, select the required number of pages per sheet.



4. Click the **Options** button. Select the **Page Borders**, **Page Layout** and **Bind Margin**. Click **OK**.
5. Click **OK**. Print the document.



Custom Page Sizes

PostScript

NOTE

One custom paper size can be defined in the PostScript driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

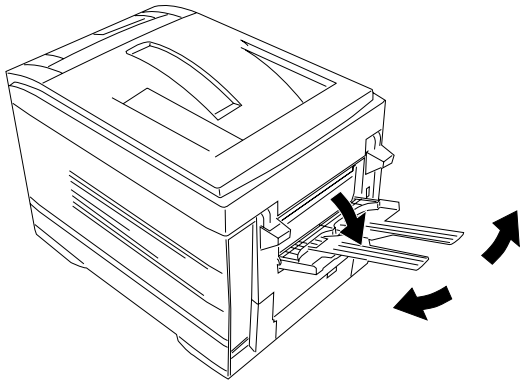
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver. Click **Properties** (or **Setup**, or your application's equivalent).

Important!

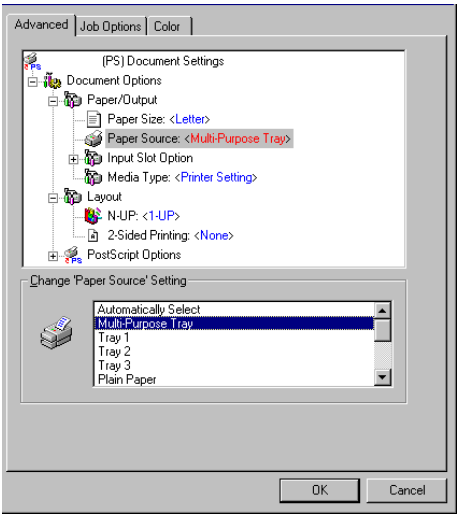
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.

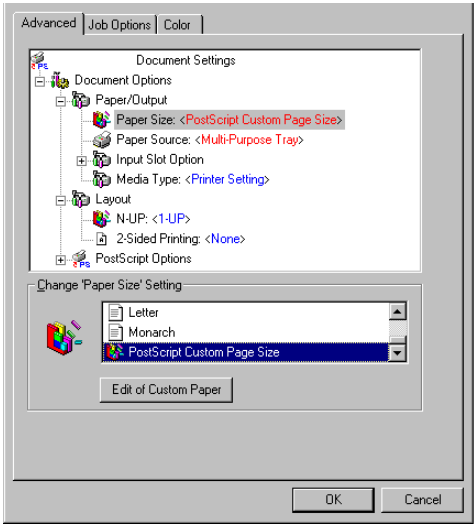


3. On the **Advanced** tab, under **Document Options** → **Paper/Output**:
   a. Click **Paper Source**. In the **Change 'Paper Source' Setting** list, select **Multi-Purpose Tray**.

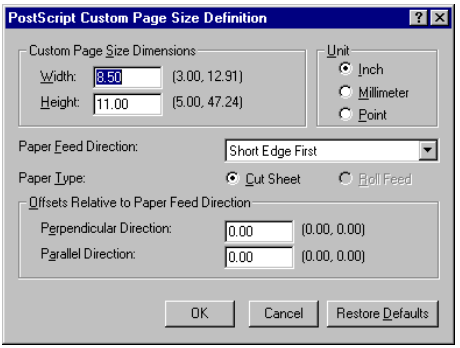


b. Click **Paper Size**.

c. In the **Change 'Paper Size' Setting** list, select **Postscript Custom Page Size.**



4. Click the **Edit of Custom Paper** button.



5. Enter the **Width** and **Height** for the custom paper.
   Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]
6. Select the **Paper Feed Direction**.

NOTE

- **Long Edge First = media feeds in long edge first**
- **Short Edge First = media feeds in short edge first**
- **Long Edge First (flipped) = Reserved for future use.**
- **Short Edge First (flipped) = Reserved for future use.**

7. Click **OK** twice.
8. Print the document.

Custom Page Sizes

PCL

NOTE

Up to 32 custom page sizes can be defined in the PCL driver.

Custom page sizes can only be printed from the multi purpose tray. The paper (media) size for the multi purpose tray must be manually set in the driver to the custom paper size before use.

Custom page sizes range:

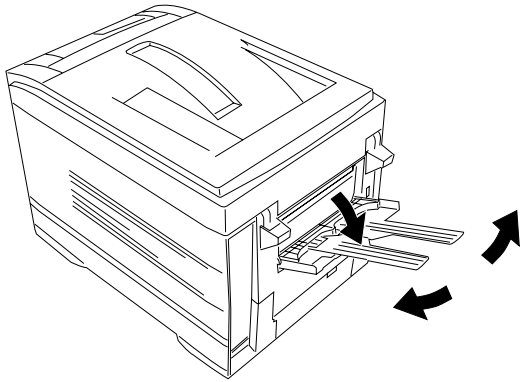
- Width: 3½ to 8½ inches [89 to 216 mm]
- Length: 5 to 14 inches [127 to 356 mm]

Important!

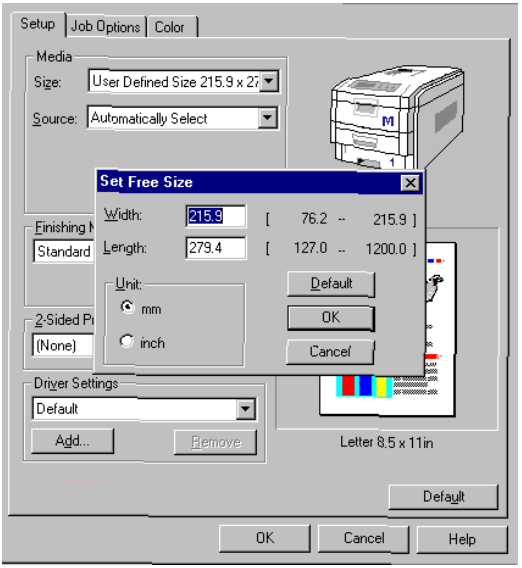
If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face *up* printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- Paper is stacked in reverse order.
- Tray capacity is about 100 sheets, depending on paper weight.



1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Setup** tab, under **Media**, in the **Size** drop-down list, select **User Defined Size**.
   The Set Free Size dialog box appears.

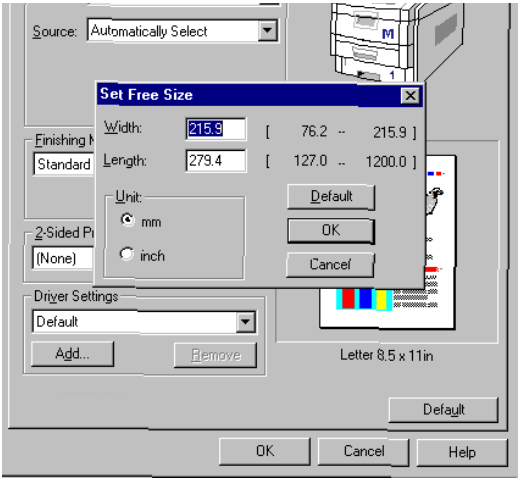


NOTE

You may see a Warning dialog box indicating a conflict. If you do, click OK.

The driver automatically makes the needed changes to correct for the conflict.

4. Select the unit. Enter the width and length measurements. Custom page sizes range:
   - Width: 3½ to 8½ inches [89 to 216 mm]
   - Length: 5 to 14 inches [127 to 356 mm]



5. Click **OK**.
6. Check that **User Defined** now appears in the **Size** list on the **Setup** tab.

NOTE

To save the setting for future use:

- **Click Paper Feed Options.**
- **Click Custom Size.**
- **Select the unit.**
- **Enter the relevant information for Width and Height.**
- **Give your custom size a name under Name.**
- **Click Add.**
- **Click OK.**

The Custom Page Size is added to the bottom of the Paper Size list.

7. Click **OK**.
8. Print the document.

Print Resolution

PCL or PostScript

Changing for a Print Job

NOTE

To change the settings to apply to all jobs (default settings):

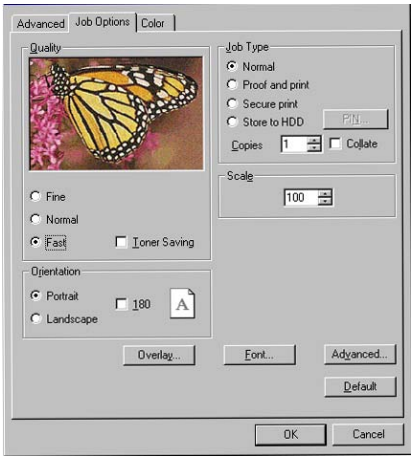
- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

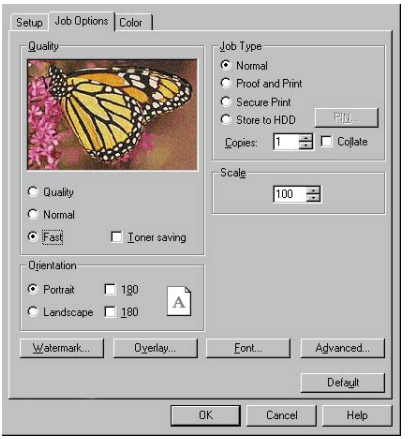
1. Open the file in your application. Select **File → Print**.
2. In the Print dialog box, click the appropriate driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. Click the **Job Options** tab.

4. Select the required printing resolution under **Quality**.
5. Select **Toner Saving** (if appropriate).
6. Click **OK**. Print the document.

PostScript Driver



PCL Driver



Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Usage Restrictions

NOTE

Before you can perform duplex printing, unit must be

- **installed in the printer**

and

- **enabled in the driver.**

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.
- Duplexing cannot be used if Paper Weight is set to Ultra Heavy.

See Paper (Media), “Weight and Type” on page 58.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

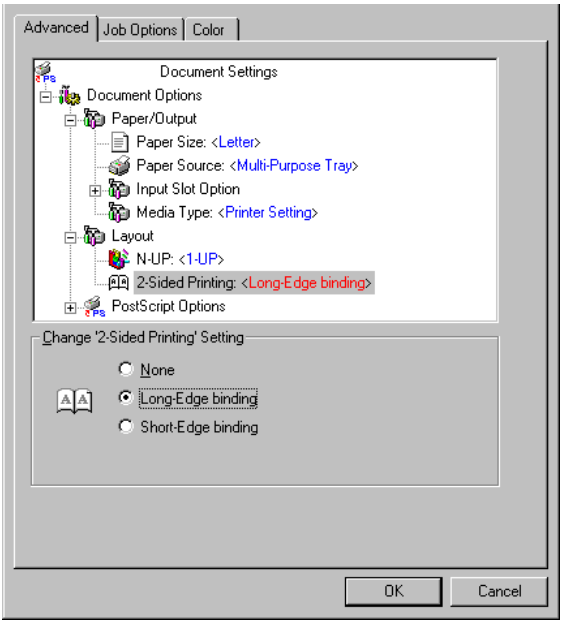
Duplex Printing

(Printing on Both Sides of the Paper)

PostScript

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PS driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Advanced** tab, under **Document Options** → **Layout**, click **2-Sided Printing.**
4. In the **Change '2-Sided Printing' Setting** list, select **Long-Edge** binding or **Short-Edge binding**.



Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Usage Restrictions

NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m^2).
- Paper must be loaded print side *up*.
- Only Tray 1, optional Trays 2 and 3, and the High Capacity Feeder trays can be used for duplex printing.
- The Multi Purpose (MP) tray *cannot* be used for duplex printing.

NOTE

To change the settings to apply to all jobs:

- **Click Start → Settings → Printers.**
- **Right click the appropriate printer name.**
- **Select Properties.**
- **Follow steps 3, etc., below.**

More tabs appear in the Properties screen for setting defaults.

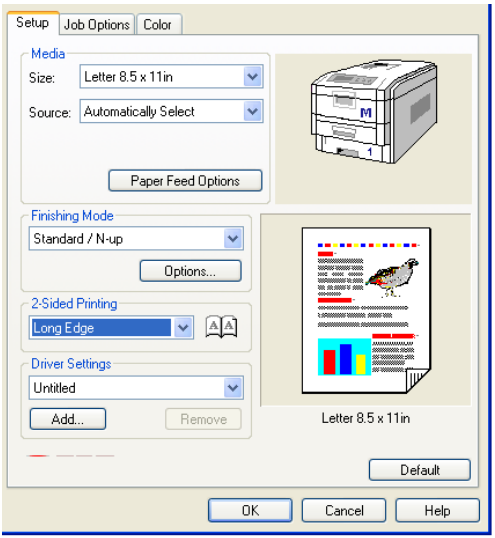
Duplex Printing

(Printing on Both Sides of the Paper)

PCL

Using

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Setup** tab, under **2-Sided Printing**, select **Long Edge** or **Short Edge**.
4. Click **OK**. Print the document.



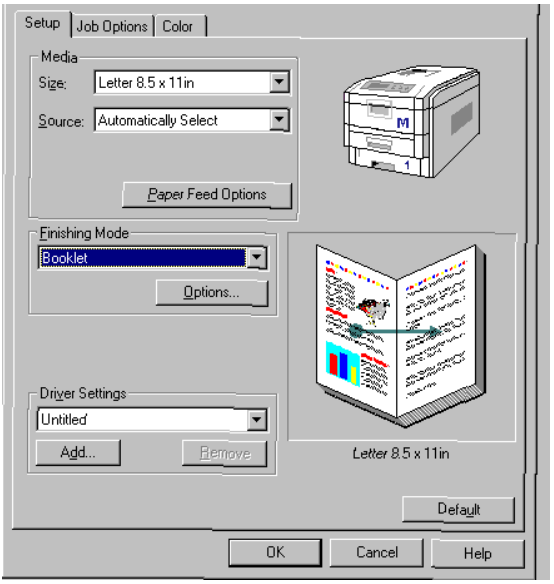
Printing Booklets

PCL Only

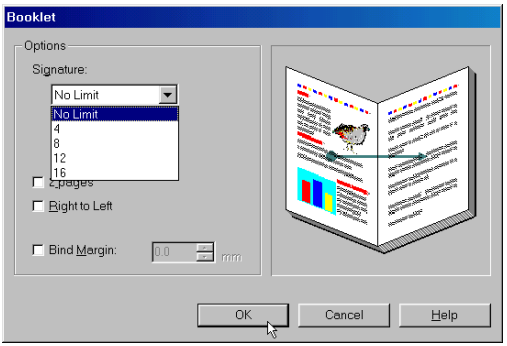
NOTES

- **You must have the duplex unit installed and enabled in order to print booklets.**
- **Not available on some network connections: see the Help file.**
- **Some software applications may not support booklet printing.**
- **The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Setup** tab, under **Finishing Mode**, in the drop-down list, select **Booklet**.



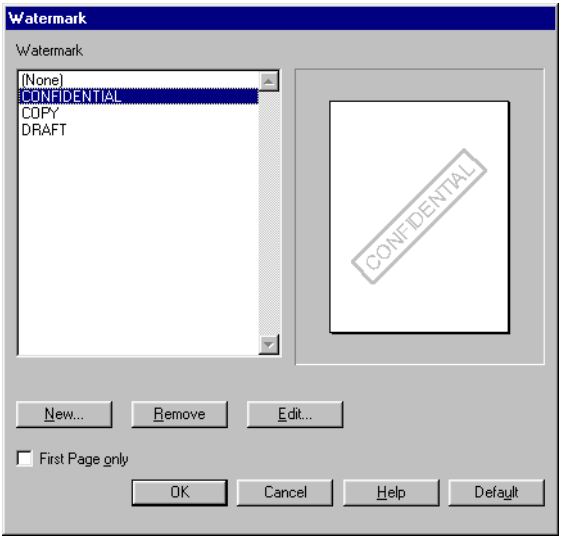
4. Click the **Options** button. Set the **Signature**, **2pages**, **Right to Left**, and **Bind Margin**, as required. See the online Help for information. Click **OK**.
5. Click **OK**. Print the document.



Printing Watermarks

PCL Only

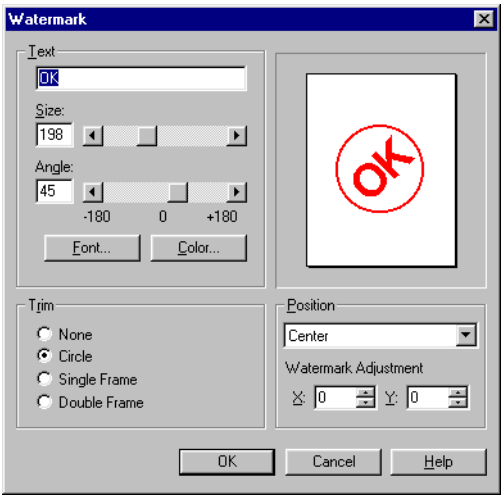
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Job Options** tab, click **Watermark**.
4. Select a name from the **Watermark** list.



NOTE

To create a new watermark or edit an existing watermark:

- **Click the New or Edit button.**



- **Enter the text for the watermark. Select the attributes (font, size, angle) to be used.**
- **Click OK.**

The new watermark appears in the Watermark list.

5. If you wish to print the watermark only on the first page of the document, select **First Page only**.
6. Click **OK** twice.
7. Print the document.

Collating

PCL or PostScript

Collating can be carried out with or without a hard disk drive installed. A printer with a hard disk drive performs better.

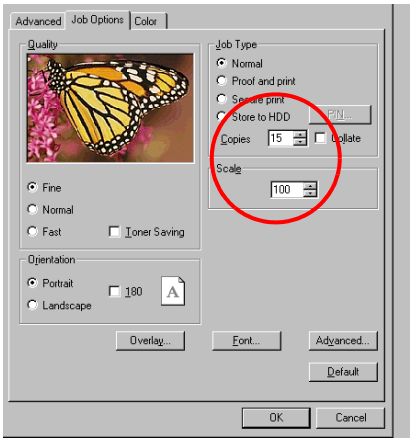
Important

If your software application has a collate option, use it instead of the collate option in the printer driver.

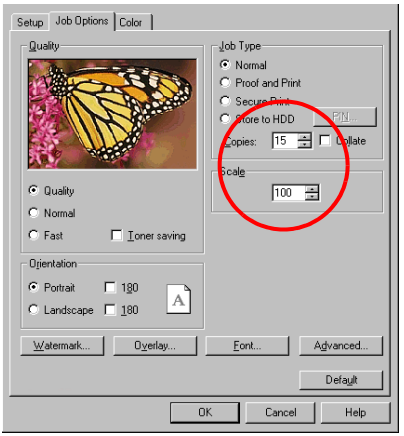
To use the printer driver to select collating:

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Job Options** tab, under **Job Type**, enter the number of copies required. *Only if the application has no collate option*—select **Collate**.
4. Click **OK**. Print the document.

PostScript Driver



PCL Driver



Proof and Print

PCL or PostScript

Using

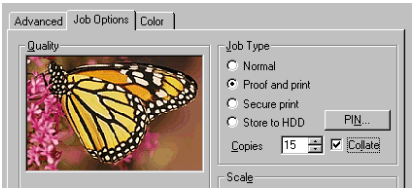
Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

NOTES

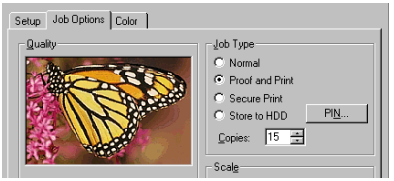
- **The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy is printed.**
- **If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.**
- **Proof and print may not be available in some software applications.**

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Select **Print to File**.
4. Click **Properties** (or **Setup**, or your application's equivalent).
5. Enter the number of copies. If required, select **Collate**.

PostScript Driver



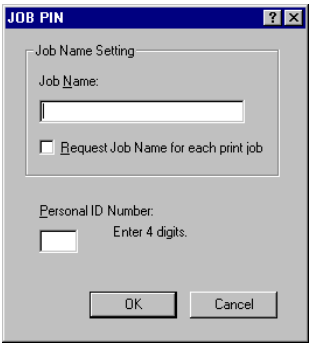
PCL Driver



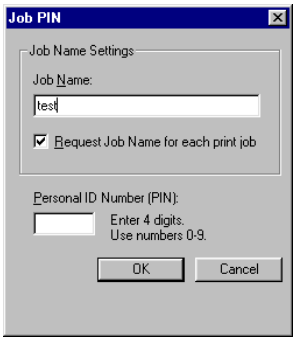
a. On the **Job Options** tab, under **Job Type**, select **Proof and Print**.

b. Enter a job name of up to 16 characters under **Job Name Setting**. If required, select **Request Job Name for each print job**.

PostScript Driver



PCL Driver



c. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

6. Click **OK**. Print the document. The document is stored on the hard disk drive. One copy is printed for checking.

7. After checking the proof, print or delete (if incorrect) the remaining copies of the document. Use the procedures given below.

Proof and Print

Printing Copies

1. Press the MENU button to access the **PRINT JOBS MENU**. Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the remaining copies of the document.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Proof and Print

Deleting Copies

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter your personal ID number.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online help for Storage Device Manager.

Secure Printing

(Printing Confidential Documents)

PCL or PostScript

Using Secure Printing

Secure printing (printing with passwords) allows you to print confidential documents on printers that are shared with other users in a network environment.

NOTE

- **The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.**
- **Secure printing may not be available in some software applications.**

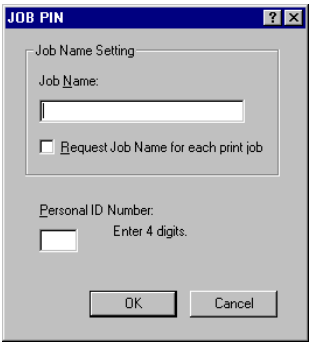
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. Select **Print to file**.
4. Click **Properties** (or **Setup**, or your application's equivalent).
5. On the **Job Options** tab, under **Job Type**, select **Secure Print**.

NOTE

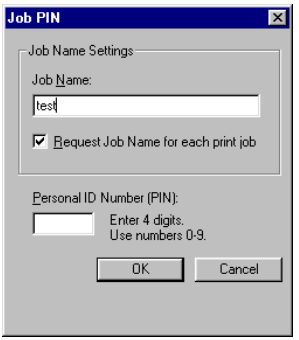
If you've already used Secure Print to place a document on the hard disk drive, but have not yet printed it out, click the PIN button and enter a new job name.

a. Enter a job name of up to 16 characters under **Job Name.** If required, select **Request Job Name for each print job**.

PostScript Driver



PCL Driver

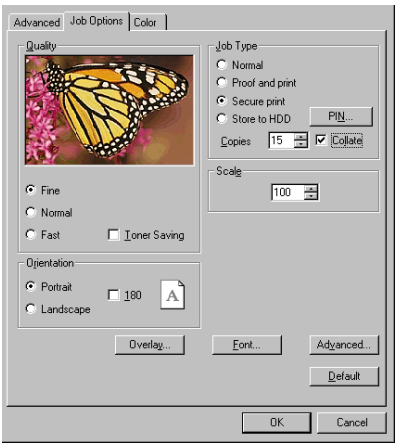


b. Type in a four digit personal ID number from 0000 to 7777. Click **OK**.

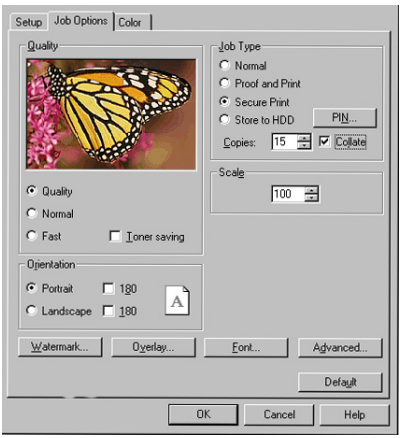
6. Enter the number of copies. If required, select **Collate**.

C73_NT_PS_SecureK.tif and C73_NT_PCL_SecureK.tif

PostScript Driver



PCL Driver



7. Click **OK**. Print the document. The document is stored on the printer's hard disk.

8. Go to the printer. Use the front panel to print the document. See below.

Secure Printing

(Printing Confidential Documents)

Printing at the Printer

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button.
   The document prints and is deleted from the hard disk drive.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Secure Printing

(Printing Confidential Documents)

Deleting the confidential document before printing it

1. Press the MENU button to access the **PRINT JOBS MENU.** Press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you set above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the job from the printer.

NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

PCL or PostScript

Storing a Document

Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead, stationery, etc.

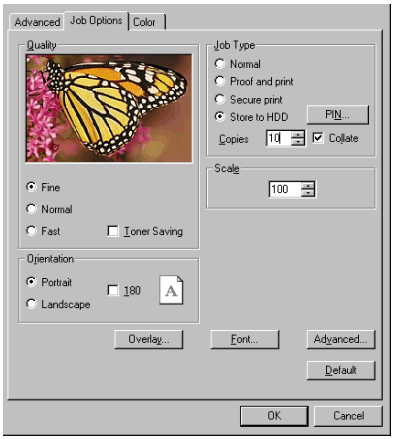
NOTE

- **The internal hard disk must be installed in the printer and enabled.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.**
- **Store to Hard Disk may not be available in some software applications.**

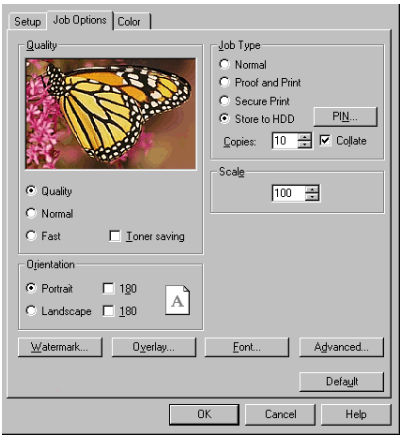
1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate driver.
3. Select **Print to file**.
4. Click **Properties** (or **Setup**, or your application's equivalent).

5. Select **Store to HDD**.

PostScript Driver



PCL Driver

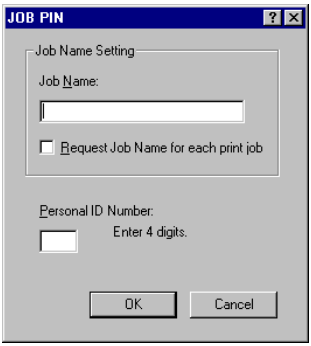


NOTE

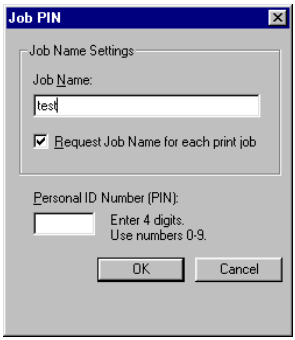
If you've already stored a document on the printer's hard disk drive, and want to store another one, click the PIN button and enter a new Job Name.

a. Enter a job name of up to 16 characters under **Job Name Setting.** If required, select **Request Job Name for each print job**.

PostScript Driver



PCL Driver



b. Type a four digit personal ID number from 0000 to 7777. Click **OK**.

6. Select the number of copies. Click **Collate**, if applicable.

7. Click **OK**. Print the document. The document is stored on the hard disk. It can then be printed on demand, or deleted. Use the procedures given below.

Hard Disk Drive

Printing a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the SELECT button to print the document.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Hard Disk Drive

Deleting a stored document

1. Press the MENU button to access the **PRINT JOBS MENU** and press the SELECT button.
2. Use the buttons on the printer control panel to enter the personal ID number you selected above.
3. Press the VALUE button until **ALL JOBS** or the required job name is displayed.
4. Press the CANCEL button to delete the remaining copies of the document.
5. When the deletion confirmation message appears, confirm by pressing the SELECT button.

NOTE

An alternative method of printing or deleting the stored document is to use the Storage Device Manager. Please refer to the online Help for the Storage Device Manager software.

Overlays

What are Overlays?

An overlay is a combination of graphics, fonts, or text that is stored and printed whenever required.

An overlay is stored in the printer's flash memory or on the hard disk (supplied on some models, optional on others).

An overlay is similar to a watermark. However, an overlay can be much more elaborate than a watermark.

Overlays can

- replace as pre-printed stationery
- add your logo or company address to a document
- create forms.

When to Use Overlays

Use overlays to print letterheads, forms, or invoices.

Using overlays can reduce the need for pre-printed stationery.

Example of Using Overlays

Use the Storage Device Manager to create and store three files in the printer:

- the company logo
- the company address
- the company mission statement.

Use the Overlay feature to place these files into your document.

You can use the files in many different combinations, according to your changing requirements.

Overlays

Creating Files for Overlays

The files to be used as overlays must be created, generated, and stored.

Then, other users can use settings in the printer drivers to use the files as overlays in documents.

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead).
2. Use the printer driver to generate a PRN file (print file).
3. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format.
4. Download the storable file to the printer.

Overlays

Requirements for Using

Read This First

Important!

1. An overlay may consist of more than one component file.
2. When the hard disk drive is installed, you *must* use the Shutdown Menu before turning OFF the printer.
3. If your software application has a collate print option, you *must* turn it OFF before you print overlays.
4. You *cannot* use overlays with the:

- Windows 2000 PostScript driver
- Macintosh driver

5. The message DISK FULL appears if there isn't enough memory for the data.

Hardware / Software Requirements

- the Storage Device Manager software must be installed.
- printer internal hard disk drive (Installation is highly recommended)

Required Actions

Before overlays can be printed, they must be

- created in a software application
- saved as a print file
- downloaded to storage

Overlays

Requirements for Using

Storage Requirements

Locations

Use Storage Device Manager to store the overlays to the printer's:

- hard disk drive

  or

- flash memory

Maximum Available Space

Hard Disk Drive

2 MB each for PCL Macros and PostScript Forms

Flash Memory

about 0.5 MB each for PCL Macros and PostScript Forms

Overlays

Creating documents to use as overlays

PCL

An overlay can be created in any software application that can

- handle logos, letterheads, forms, etc.

  and

- print to a file.

To create a print (PRN) file:

1. Open your application program.
2. Open the file to be stored as an overlay.
3. Choose **File,** then **Print**.
4. Make sure that the "**Print To File**" option is switched on in your application's Print dialog box.
5. Depending on the application, you may need to select your printer model.
6. Click **Properties . . .** This should open the printer driver settings.

Important

You must use the Oki PCL driver to do this.

7. Choose all of the printer driver settings with which you would like your overlay to print.
8. Try to keep the overlay to a single sheet.
   Don't use N-up, duplex, finisher options, etc. when creating an overlay. These can be added when printing the document that includes the overlay.
9. Click **OK** to Close the Default dialog box.
10. Print the document.
    Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
    Give the file a meaningful name such as "my template.prn."

Overlays

Creating documents to use as overlays

PostScript

An overlay can be created in any software application that can

- handle logos, letterheads, forms, etc.

  and

- print to a file.

1. Open your application program.
2. Open the file to be stored as an overlay.
3. Choose **File,** then **Print**.
4. Make sure that the **Print To File** option is switched on in your application's Print dialog box.
5. Depending on the application, you may need to select your printer model.
6. Click **Properties...** This should open the printer driver settings.
7. Select the **Job Options** tab.
8. Click the **Overlays...** button.
9. Choose **Create Form** from the menu.
10. Click **OK** to close the Properties dialog box.
11. Click **OK** to print the document to a file.

Important

You must use the Oki PostScript driver to do this.

Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk.
Give the file a meaningful name such as “my template.prn.”

Overlays

Downloading the print file to use as an overlay

PCL or PostScript

Once you have created a print (PRN) file on your PC's hard disk, you must download this file to the printer.

Use the Storage Device Manager to download the PRN file.

The Storage Device Manager software is included with the original software CDs that were supplied with your printer.

1. Launch Storage Device Manager.
2. Allow the program to discover (locate) the printer.
3. Click **Project**, then **New Project**.
4. From the **Project** menu, select **Add File to Project**.
5. Select the PRN file(s) that you created earlier.
   PCL: This automatically generates a BIN file.
   PostScript: This automatically generates a PostScript hst file.

Important!

The BIN file is automatically assigned an ID number.

To change the ID number

- double-click the number
- enter a new one in the ID field.

6. Note the name that the file is assigned in the Storage Device Manager.
   Names are case sensitive.

NOTE

The assigned file name is very important!

You must use this ID number or name when creating overlays in the printer driver.

You should change the ID number or name from the default value.

***Note the new name for later use*.**

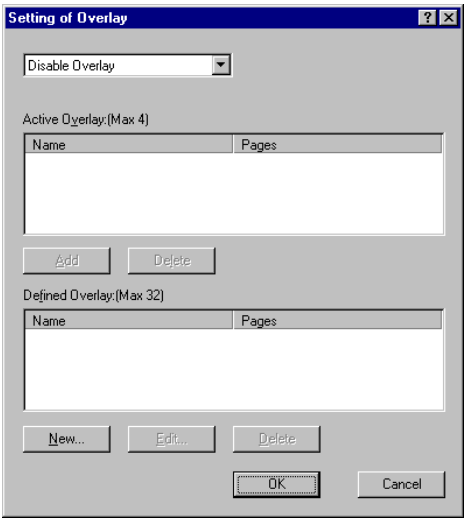
7. Make sure the printer being used is highlighted in the lower window of the Storage Device Manager.
8. Select the **Project** menu. Choose **Send Project Files to Printer**.
   This downloads the file to the printer.
   If the file was downloaded successfully, "Command Issued" displays.
9. Close the Storage Device Manager.

Overlays

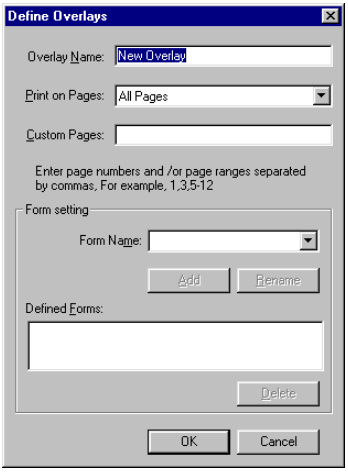
Defining Overlays

PostScript

1. Click **Start** → **Settings** → **Printers.**
2. RIght click the printer name. Click **Document Defaults**.
3. On the **Job Options** tab, click the **Overlay** button.



4. Click the **New** button.

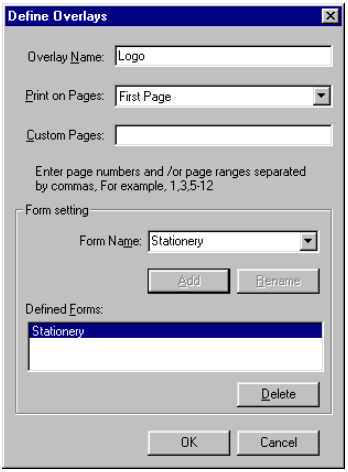


5. In the **Overlay Name** list, enter the file name of the overlay. Select the pages where you want the overlay to print.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printers' hard disk drive. It is case sensitive.

6. Under **Form setting**, in the drop-down list, enter or select a form name. Click **Add.**

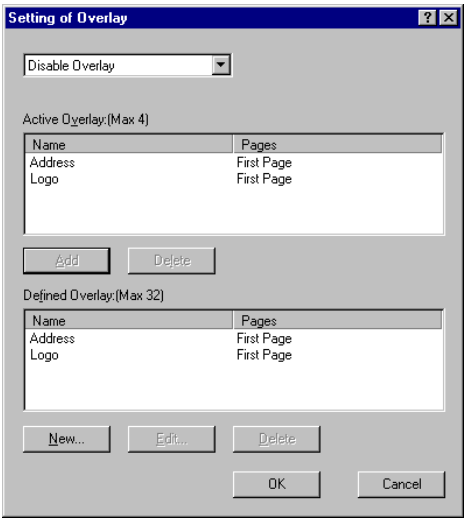


NOTE

The Form Name is a random name of your selection.

7. Click **OK**.
8. To continue to add files to the overlay (if required), repeat steps 5 through 8.

9. Under **Defined Overlay**, highlight the overlay name(s). Click **Add** to add the overlay(s) to the list under Active Overlay. To select more than one overlay, hold the CTRL key while clicking on each name.



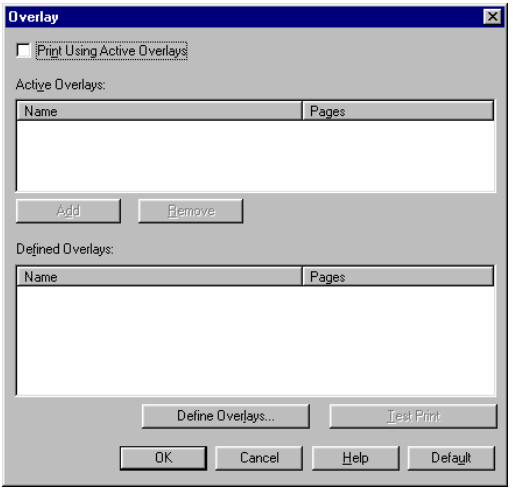
10. At the top of the dialog box, use the drop-down list to select **Use Overlay**. Click **OK**.
11. Click OK to close the Default dialog box.

Overlays

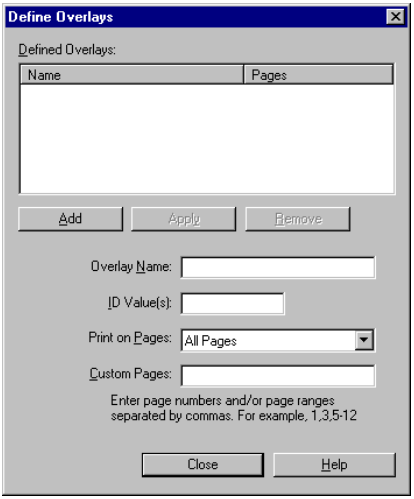
Defining Overlays

PCL

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **Document Defaults**.
3. Click the **Job Options** tab.
4. Click the **Overlay...** button.



5. To define an overlay, click the **Define Overlays** button.



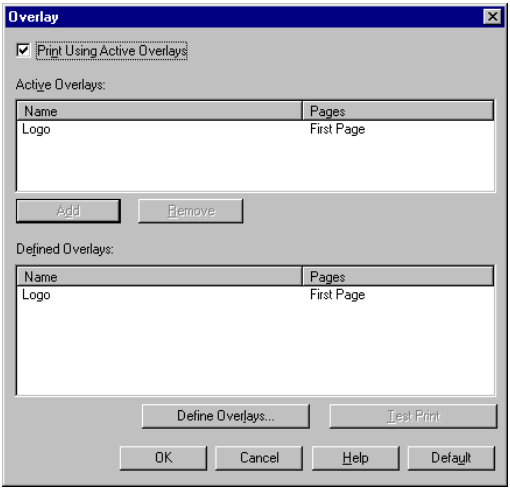
6. In the **Overlay Name** list, enter the file name of the overlay

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printer's hard disk drive. It is *case sensitive*.

7. In **ID Values, e**nter the ID of the file. Please refer to the instructions for the Storage Device Manager utility.
8. Select which pages the overlay is to be printed on from **Print on Pages** or use **Custom Pages** to select specific page numbers in the document. Click **Add**.
9. Click **Close**.
10. Repeat steps 5 though 9 for each overlay you wish to add.
11. Under **Defined Overlay**, highlight the overlay name. Click the **Add** button to add the overlay to the list in **Active Overlays**.

12. Select **Print Using Active Overlays**.



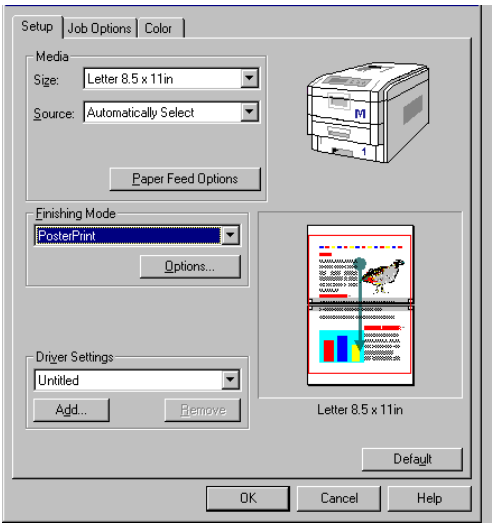
13. Click **OK**.
14. Click **OK** to close the Default dialog box.

Printing Posters

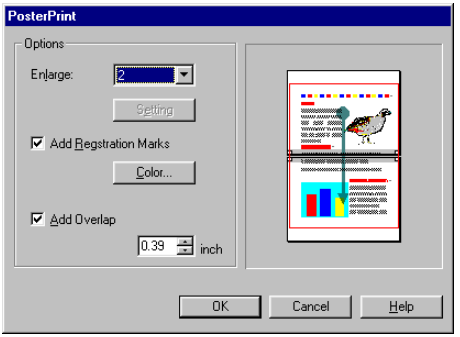
PCL Only

This option allows you to configure and print posters by breaking up the document page into multiple pieces. Each piece prints, enlarged, on a separate sheet. Then, the separate sheets are combined to produce a poster. It is only available with the PCL printer driver.

1. Open the file in your application. Select **File** → **Print**.
2. In the Print dialog box, click the appropriate PCL driver. Click **Properties** (or **Setup**, or your application's equivalent).
3. On the **Setup** tab, under **Finishing Mode**, select **Poster Print**.



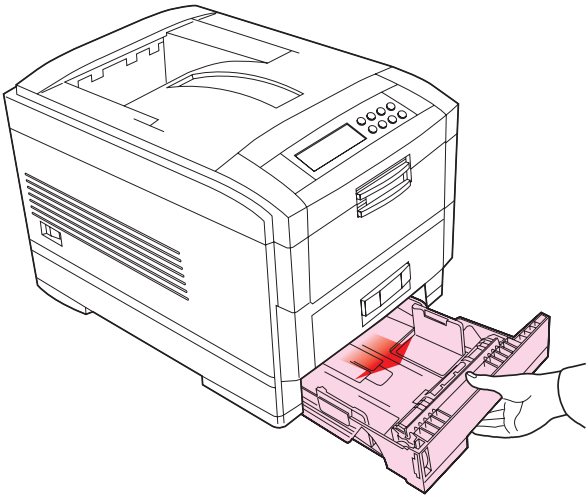
4. Click **Options...** and enter the configuration details.
5. Click **OK** twice.
6. Print the document.



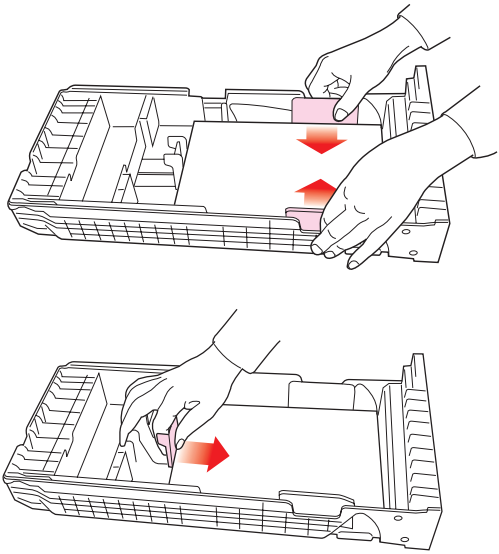
Adding Paper

The display indicates when the number of sheets of paper in any paper tray falls below 30.

1. Remove the paper tray.
2. Remove the remaining sheets of paper.
3. Refill the tray with up to a ream (500 sheets) of paper. Replace the sheets removed in step 2. This guarantees that the oldest paper is used first. Doing this helps preventing paper jams.



4. Check that the paper guides and rear stopper are correct for the size of paper being used.



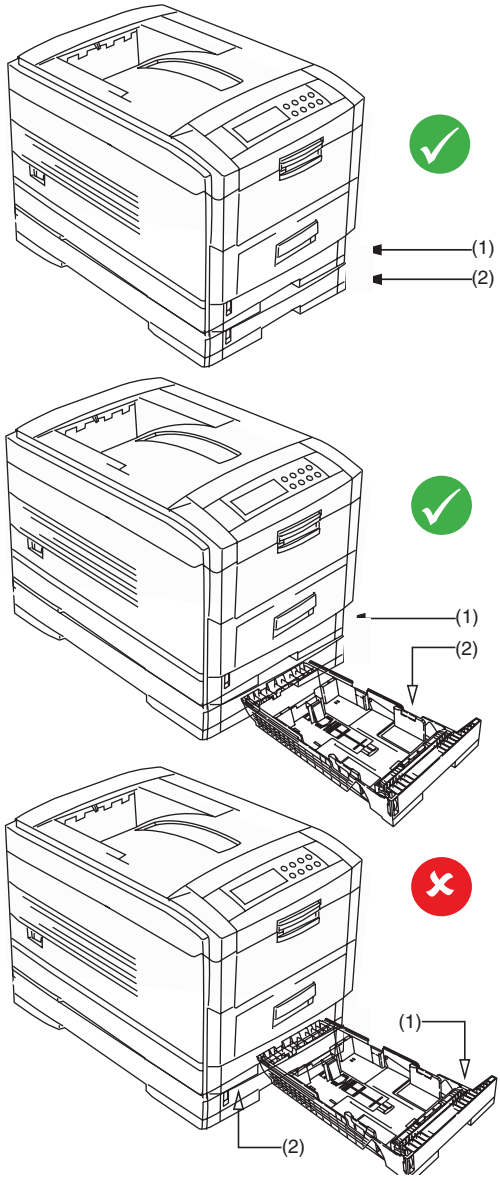
5. Close the paper tray *gently*.

Important!

To prevent jams:

- Make sure there is no space between the paper and the paper guides and rear stopper.
- Don't overfill the paper tray. Capacity depends on the type of paper and the paper weight (max 530 sheets of 80gm²).
- Don't load damaged paper.
- Don't mix paper of different sizes, paper quality or thickness.
- Don't remove the paper tray during printing.

6. If installed, a lower paper tray cannot be used to print if there is no paper tray inserted above it.



Changing the Toner Cartridge

NOTE

After installing the new toner cartridge, the message on the display TONER LOW or CHANGE TONER should disappear. However, this sometimes does not disappear until printing has been carried out. If it still does not disappear, reinstall the toner cartridge.

When the toner is running low, ***** TONER LOW is displayed in the control panel (*** is the color name).

If printing continues without replacing the toner cartridge, CHANGE ***** TONER is displayed and printing is cancelled. Depending on the operating environment, print may become faint before this message is displayed.

At this stage, remove the toner cartridge and check whether it is empty. If so, the toner cartridge needs to be replaced.

Cartridge life is approximately 10,000 letter-size pages at 5% print density. The first toner cartridge installed in a new image drum needs to be replaced after less than this amount because the toner cartridge has to fill a new image drum.

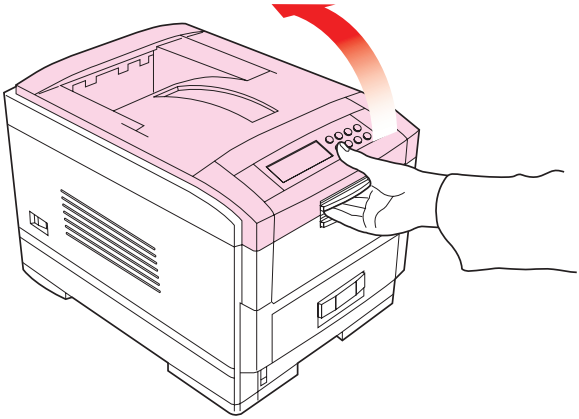
WARNING!

Take extreme care when handling toner.

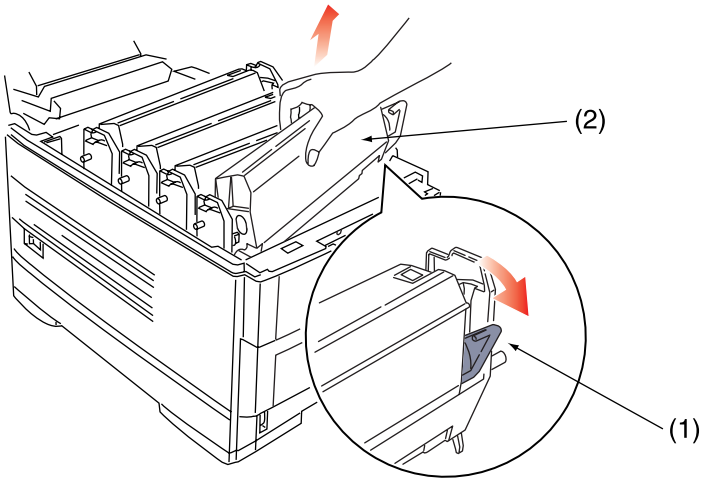
- ***Toner can be harmful if inhaled, swallowed or if it gets in the eyes.***
- ***Toner can also stain hands and clothing.***

See the Material Safety Data Sheets in your* Warranty, Regulatory and Safety Information *booklet for more information.

1. Turn off the printer.
2. Open the top cover.



3. Check the color label of the toner cartridge to be changed.
4. Locate the colored lever (1), on the right side of the toner cartridge. Move it (as shown by the arrow) as far as it will go.
5. Lift the lever end of the cartridge. This disengages the locating peg on the image drum from the toner cartridge.

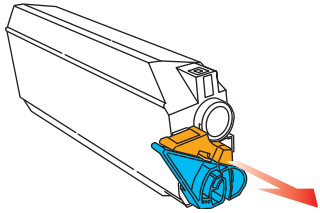


6. Remove the toner cartridge (2).

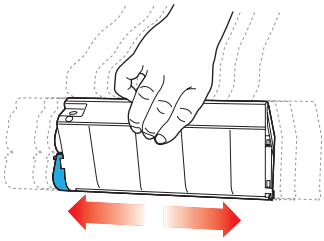
CAUTION!

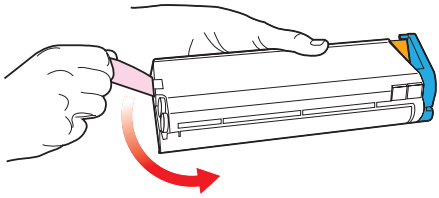
Dispose of the toner cartridge in accordance with local legislation.

7. Unpack the new toner cartridge and remove the orange shipping clip.

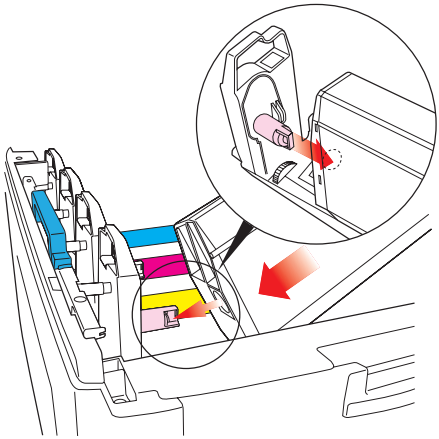


8. Shake the new toner cartridge back and forth several times. Then holding the toner cartridge horizontally, remove the tape.

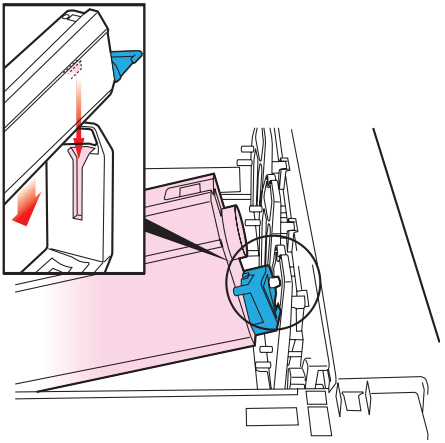




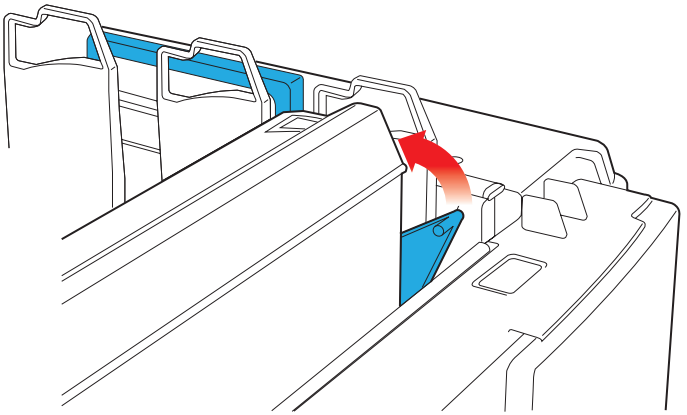
9. Insert the new toner cartridge into the image drum, left side first, engaging the drum locating peg in the hole in the toner cartridge.



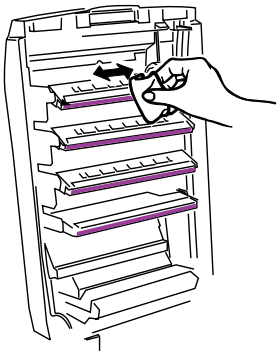
10. *Gently* push the toner cartridge down, engaging the locking pin into the groove on the image drum.



11. *Gently* push the colored lever forward until it stops. This releases the toner into the image drum.



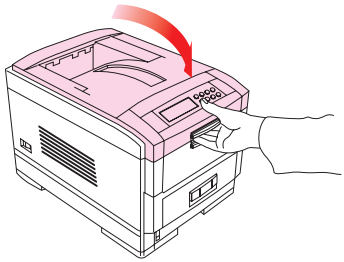
12. *Gently* wipe the LED head surface with LED lens cleaner or a soft tissue.



CAUTION

Do not use methyl alcohol or other solvents on the LED head. These solvents damage the lens surface.

13. Close the top cover.



NOTE

After installing the new toner cartridge, the message on the display TONER LOW or CHANGE TONER should disappear. However, this sometimes does not disappear until printing has been carried out. If it still does not disappear, reinstall the toner cartridge.

Changing the Image Drum

When the image drum reaches the end of its product life, ***** CHANGE DRUM** is displayed in the control panel (*** is the color name). If printing continues without replacing the image drum, **CHANGE ***** IMAGE DRUM** is displayed and printing is cancelled.

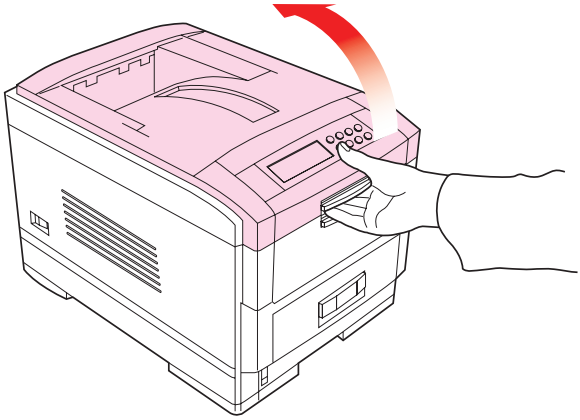
Change the toner cartridge and clean the LED head at the same time as changing the image drum.

Image drum life is approximately 23,000 sheets of letter-size media. This assumes a typical office environment where 20% of print jobs are one page emails, 30% are 3-page documents containing only words (no graphics) and 50% are print runs of 15 pages or more.

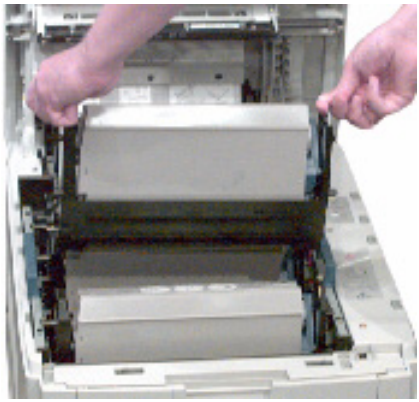
CAUTION!

- **Never expose the image drum to direct sunlight.**
- **Never expose the image drum to light for more than 5 minutes.**
- **Never touch the surface of the green drum inside the image drum unit.**

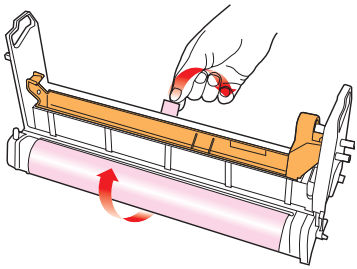
1. Turn off the printer.
2. Open the top cover.

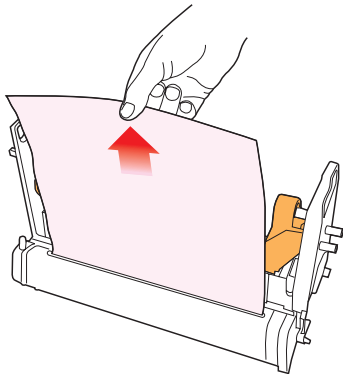


3. Remove the appropriate image drum/toner cartridge from the printer.

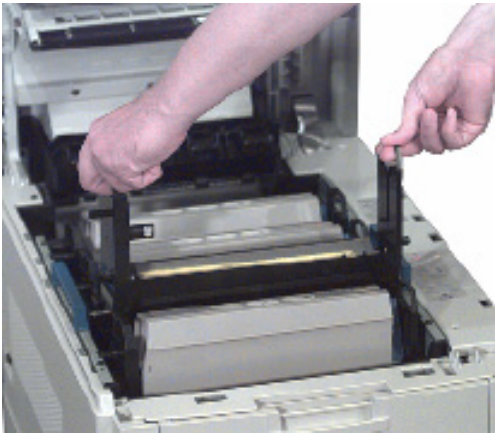


4. Make sure the replacement image drum is the correct color and remove it from the packaging.
5. Remove the protective sheet from the new image drum.

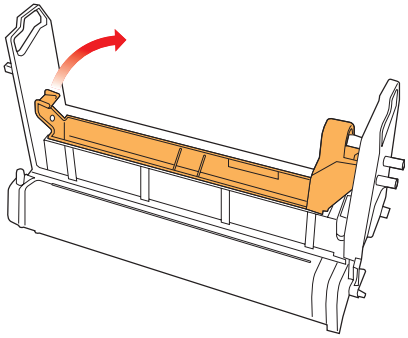




6. Install the new image drum in the printer.



7. Push the tab inwards and remove the blanking plate from the image drum.

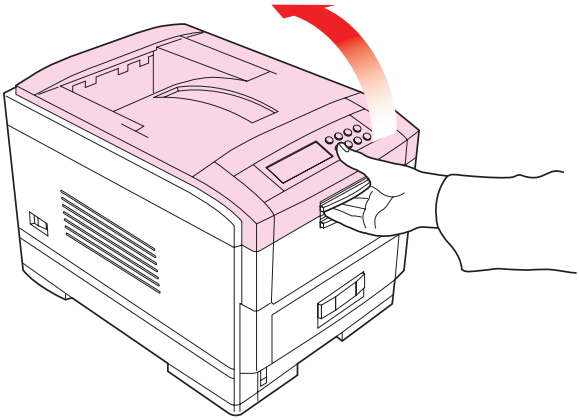


8. Install a new toner cartridge. See “Changing the Toner Cartridge” on page 484.
9. Close the top cover.

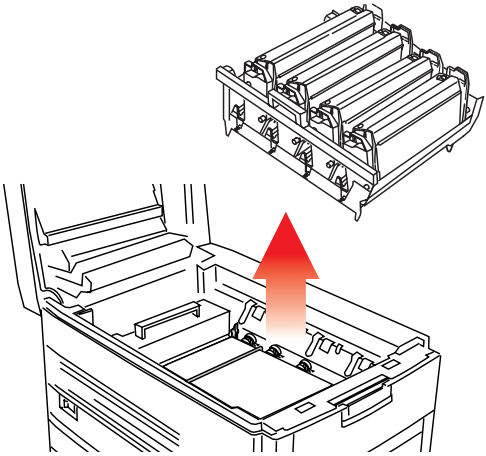
Changing the Transfer Belt

When the transfer belt reaches the end of its product life, CHANGE BELT UNIT is displayed in the control panel. Transfer belt life depends on the number of sheets per print job. When single sheets are printed, transfer belt life is reduced.

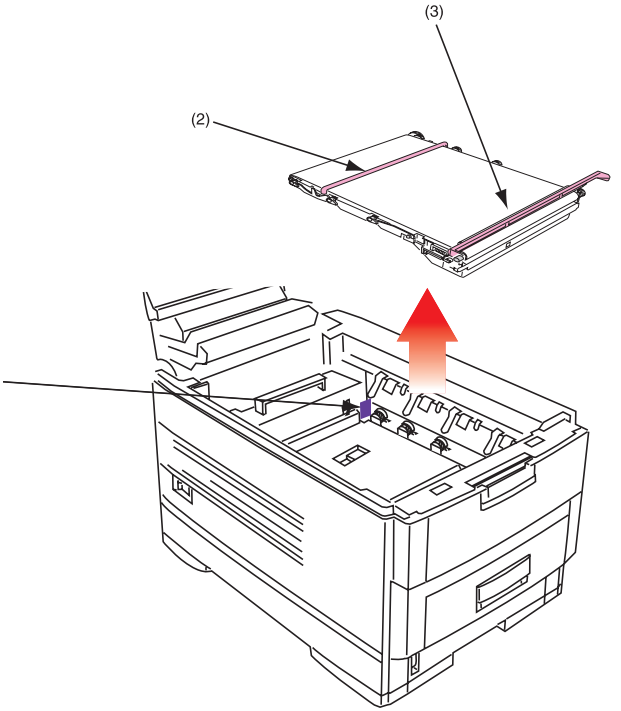
1. Turn off the printer.
2. Open the top cover.



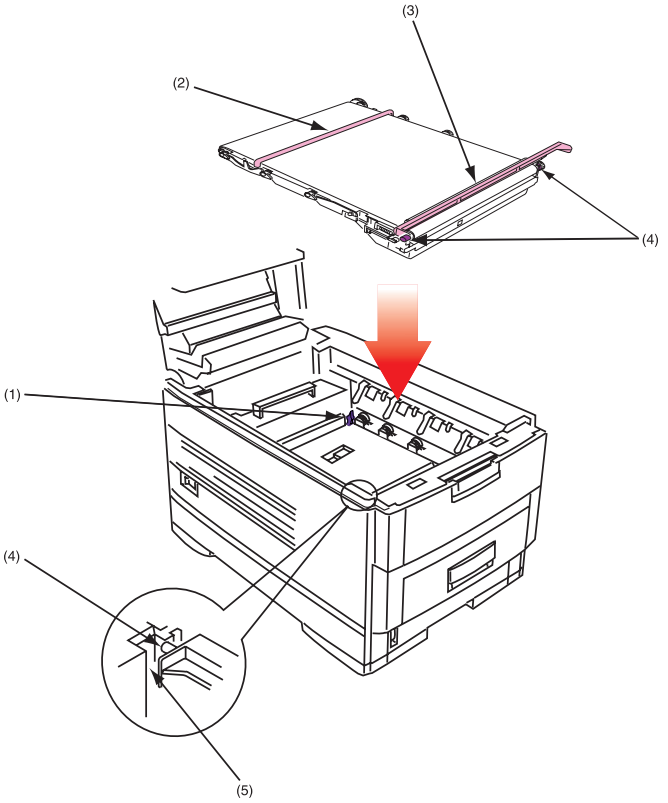
3. Remove the cradle (complete with the four image drums and toner cartridges) from the printer.



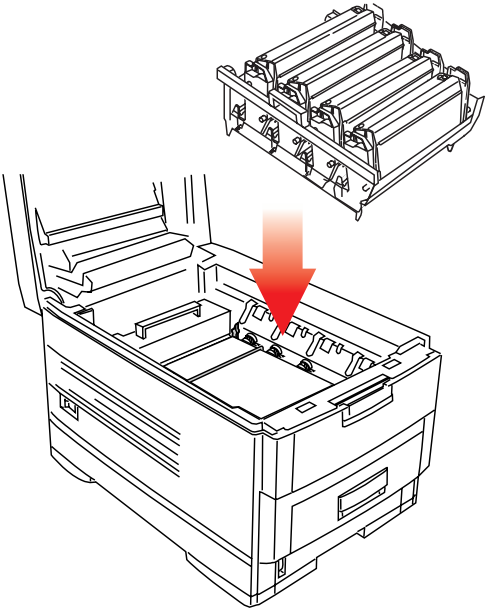
4. Press back the lock lever (1).
5. Use the handles (2 and 3) to remove the old transfer belt from the printer.



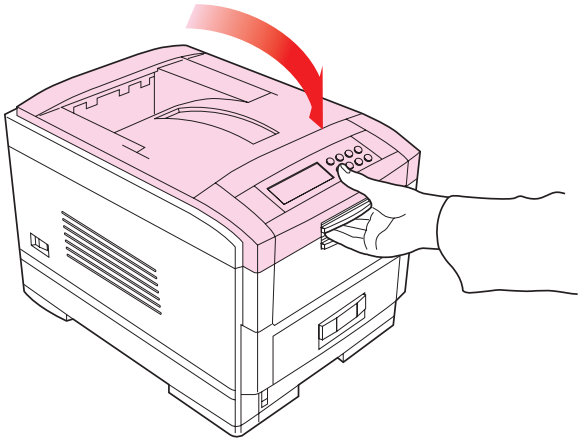
6. Remove the new transfer belt unit from its packaging.
7. Using the handles (2 and 3), align the pins (4) with the grooves (5) on the printer and insert the new transfer belt into the printer.



8. Move the lock lever (1) toward the front of the printer. Make sure it locks the transfer belt into place.
9. Reinstall the cradle complete with the four image drums and toner cartridges in the printer.



10. Close the top cover.



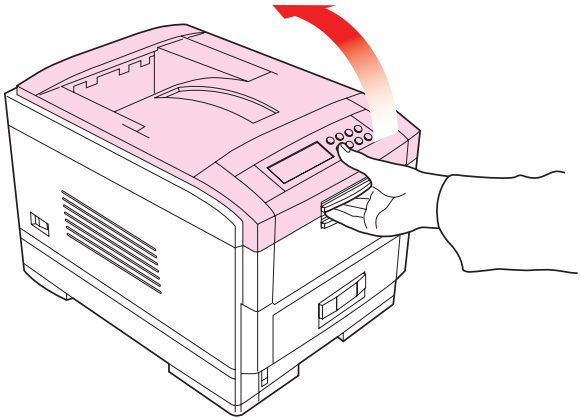
Changing the Fuser

WARNING!

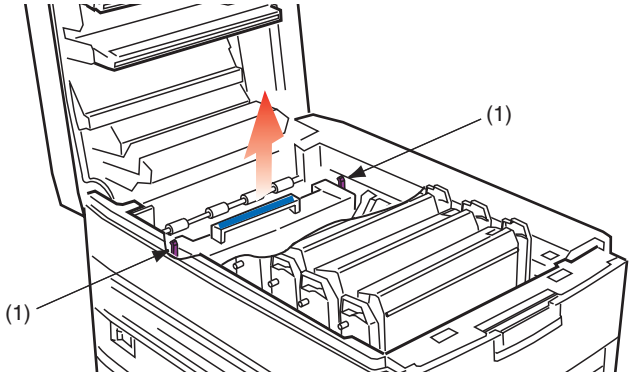
The fuser unit is very hot after printing. Always use the handle when lifting it.

When the fuser unit reaches the end of its product life, CHANGE FUSER UNIT is displayed in the control panel. Fuser unit life is approximately 60 000 A4 sheets.

1. Turn off the printer.
2. Open the top cover.

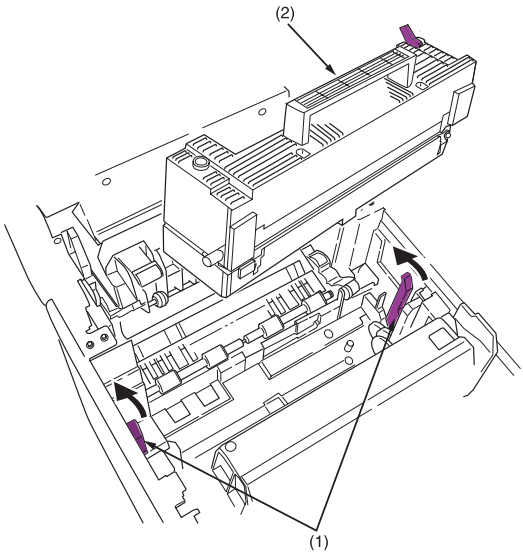


3. Move the two locking levers (1) to the rear of the machine to release the fuser unit.

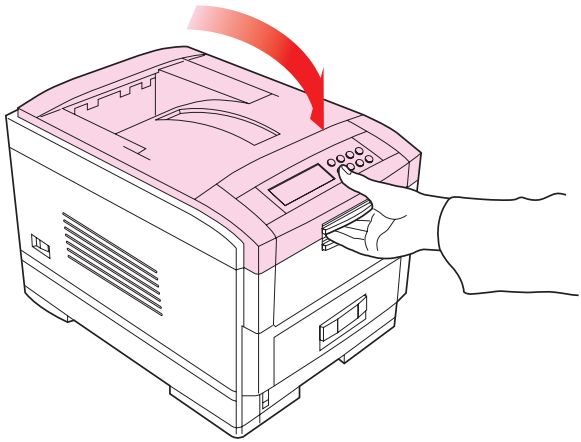


4. Use the handle (2) to remove the fuser unit from the printer.
5. Remove the new fuser unit from its packaging. Lift off the shipping tape at either end. As you remove the tape, the levers at either end of the fuser should move into the locked position.

6. Using the handle (2), install the new fuser unit into the printer. Make sure the two spring loaded locking levers (1) lock the fuser unit into place.



7. Close the top cover.



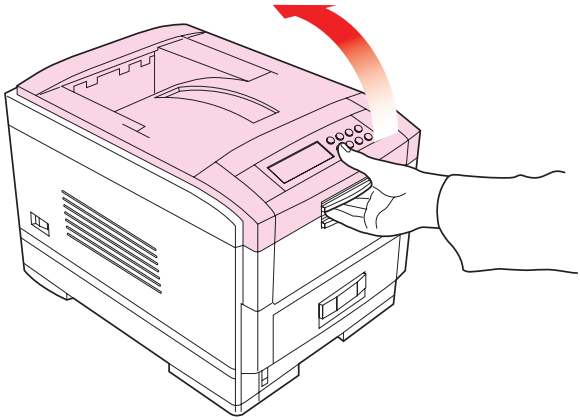
Cleaning the LED heads

CAUTION!

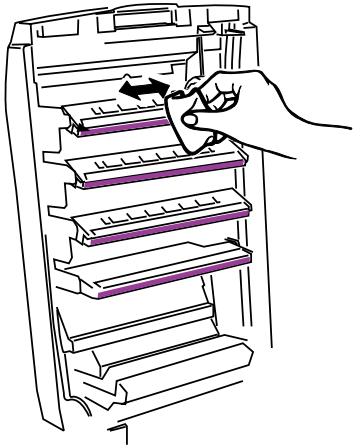
Do not use methyl alcohol or other solvents on the LED heads. These solvents damage the lens surface.

Clean the LED heads when printing does not come out clearly, has white lines or when text is blurred.

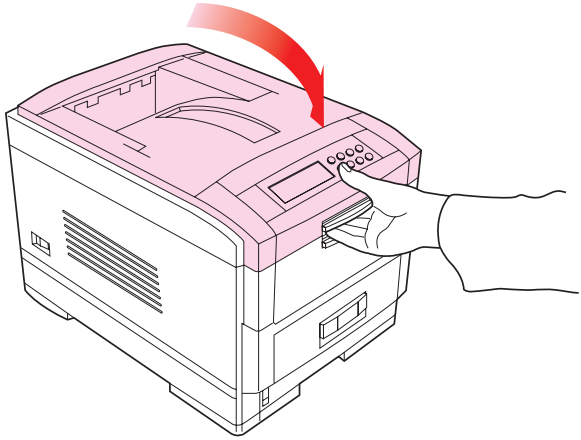
1. Turn off the printer.
2. Open the top cover.



3. *Gently* wipe the LED head surface with LED lens cleaner or soft tissue.



4. Close the top cover.



Moving (Shipping) the Printer

WARNING

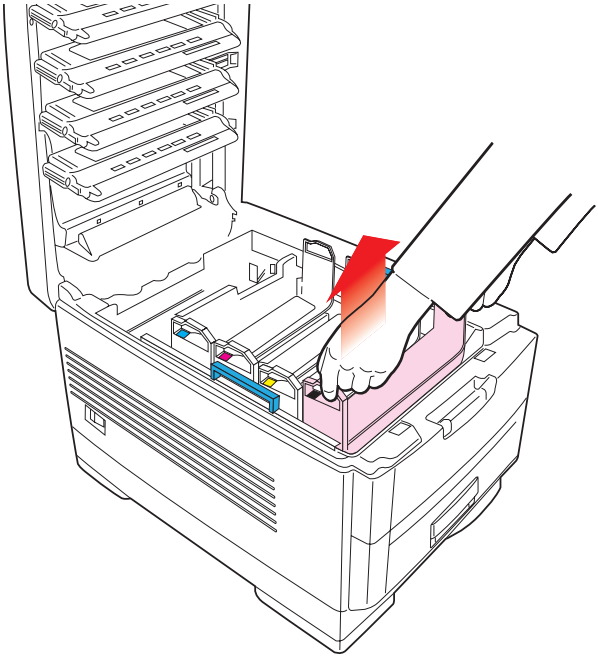
This printer weighs 106 lbs. (48 kg).
Two people are required to lift the printer safely.

This printer is a precision machine.

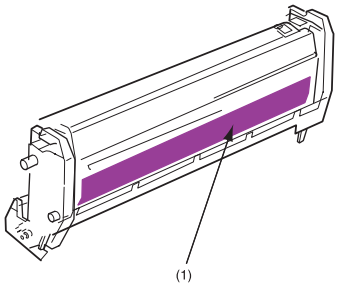
Moving the printer without the protective packaging may damage the printer.

To prepare the printer for moving:

1. Turn off the printer.
2. Disconnect the power cable from the printer.
3. Disconnect the printer interface cable from the printer.
4. Remove any paper from the paper trays.
5. Open the top cover. Remove the four image drums.



6. Seal the aperture on each image drum and its toner cartridge with plastic adhesive tape (1).
   This prevents any toner from spilling during moving.



7. Place the four image drums (complete with their toner cartridges) back into the printer.
8. Use the original packaging materials that came with your printer.
   Place the printer inside its box and seal the box.

WARNING

This printer weighs 106 lbs. (48 kg).
Two people are required to lift the printer safely.

Messages on Control (Front) Panel Display

The control (front) panel has a liquid crystal display (LCD).

The display indicates the printer status and if there is a problem with the printer.

The messages (status and error) are listed below, together with an explanation of what each message means:

List of Messages

The messages are listed in alphabetical order.

	Display Message	Meaning
1	***** DRUM NEAR LIFE	An image drum is nearing the end of its life. (***** indicates color)
2	***** EMPTY	Warning that Tray ***** is empty. MP Tray is Tray 0.
3	***** NEAR END	The paper in the selected ***** is nearly finished. (***** indicates paper tray).
4	***** TONER LOW	Toner is low (***** indicates color).
5	***** TONER SENSOR ERROR	Error with the toner sensor (***** indicates color). Call for service.
6	BELT UNIT MISSING	Transfer belt unit is missing.
7	CANCELLING JOB	Cancelling the current job.
8	CENTRO I/F ERROR	Centronics interface error (parallel interface).
9	CHANGE ***** IMAGE DRUM	Change the image drum (***** indicates color).
10	CHANGE BELT UNIT	Change the transfer belt.
11	CHANGE FUSER UNIT	Change the fuser unit.
12	CHANGE PAPER TO *****	Paper must be changed to correct paper size and/or media type. (***** indicates size or media type).
13	CHECK *****	Check Tray ***** for paper jam. MP tray is Tray 0.

	Display Message	Meaning
14	CHECK BELT UNIT	Check the transfer belt for paper jam, correct installation, etc.
15	CHECK DUPLEX	Check the duplex unit for paper jam, correct installation, etc.
16	CHECK FUSER UNIT	Check the fuser unit for paper jam, correct installation, etc.
17	CHECK IMAGE DRUM	Check the image drum for correct installation, etc. Color is indicated.
18	COLLATE FAIL	Collating of multiple copies has failed.
19	COLOR ADJUSTING	Adjusting head so that colors do not shift on to each other.
20	COLOR BALANCE ADJUST	Adjust the color balance.
21	COMMUNICATION ERROR	There is an error with communications to computer.
22	DATA ARRIVE	Data has been received, but processing has not started yet.
23	DATA PRESENT	Unprinted data remains in buffer. Waiting for data to follow.
24	DISK FILE OPERATION FAILED	Error with hard disk operations.
25	DISK FILESYSTEM IS FULL	Hard disk/flash memory full.
26	DISK FULL	The internal hard drive is full.
27	EEPROM INITIALIZE ERROR	Call for service.
28	EMPTY	Indicates which paper tray is empty.
29	ERROR POSTSCRIPT	A PostScript error has occurred.
30	FATAL ERROR	Call for service.
31	FUSER UNIT MISSING	Fuser unit is missing.
32	INSTALL ADDITIONAL MEMORY	Additional memory is required before job can be printed. See “Memory (Additional)” on page 539.
33	INSTALL NEW IMAGE DRUM	Install a new image drum. Color is indicated. See “Changing the Image Drum” on page 491.
34	INSTALL NEW TONER	Install a new toner cartridge. Color is indicated.

	Display Message	Meaning
35	INSTALL PAPER CASSETTE	Install the paper cassette. Paper tray is indicated. See “Loading Paper” on page 32.
36	INVALID DATA	Data is incorrect.
37	LOAD	Load correct paper size/type. Size/type is indicated. See “Loading Paper” on page 32.
38	MEDIA MISMATCH	Paper type set via menu does not match that sent via driver.
39	NETWORK ERROR	Network error.
40	OFFLINE	Shows offline status.
41	ONLINE	Shows online status.
42	OPEN UPPER COVER	Open the upper cover.
43	PAPER JAM	A paper jam has occurred.
44	PAPER SIZE ERROR	Indicates wrong paper size.
45	PLEASE POWER OFF	Printer must be turned off after disk/flash initialization.
46	POWER SAVE	The printer is in power save mode.
47	PRINTING	Data is being printed.
48	PROCESSING	Data is being processed.
49	RAM CHECK	RAM is checked after printer is turned on.
50	REGISTRATION ADJUST TEST	Registration adjustment being tested.
51	REGISTRATION ERROR	An error has occurred setting up the registration.
52	REMOVE THE PAPER	Indicates wrong paper being used.
53	SERVICE CALL	A serious error has occurred Call for service.
54	SHUTDOWN	Starts the shutdown procedure to protect the file system on hard disk.
55	SIZE MISMATCH	Change paper to correct size/type. Press On-line to continue.
56	STACKER FULL	Stacker is full. Remove the paper.

	Display Message	Meaning
57	UNSUITABLE SIZE	Indicates wrong paper size.
58	USB I/F ERROR	USB interface error has occurred.
59	WARMING UP	The printer is warming up.

Repeating Asterisk (*) Symbol

An asterisk (*) symbol appears on the display, repeatedly moving across the first line then the second.

Possible cause	Remedy
The main board is not properly seated in the printer.	Turn the printer off, then reseat the main board and turn the printer back on again.

Paper Jams

Clearing

NOTE

Do not close the top cover *completely* (until it latches) during this process.

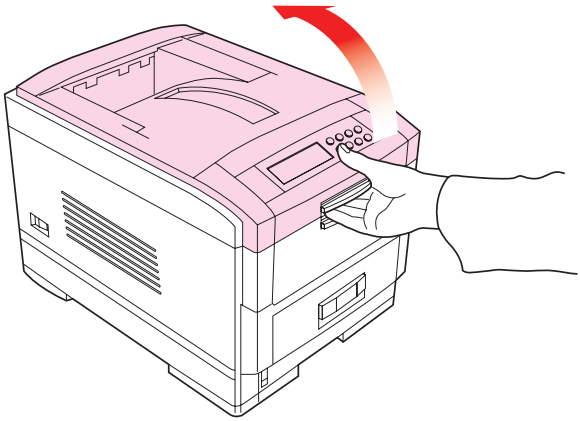
If the top cover is closed too soon, the paper jam error does not clear.

To minimize possible damage to the drums due to exposure to light, lower the top cover when appropriate, but do not press down to latch it.

Paper jams are indicated by an error message on the display.

Paper jams are cleared as follows:

1. Open the top cover of the printer.



Paper Jams

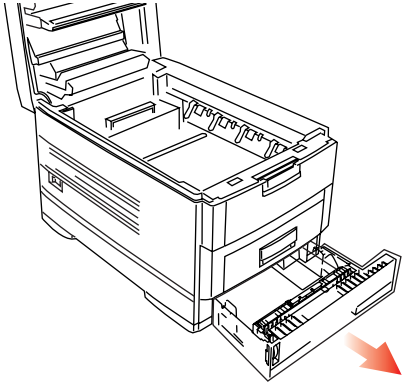
Clearing

Check the paper tray

2. Pull out the paper tray.

a. Remove any jammed paper from the printer.

b. Gently push the paper tray back in.



Paper Jams

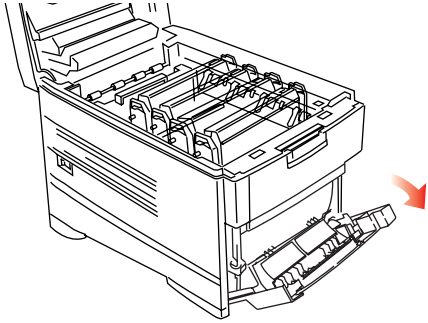
Clearing

Check behind the front cover

3. Open the front cover.

a. Remove any jammed paper.

b. Close the front cover.



Paper Jams

Clearing

Check the transfer belt

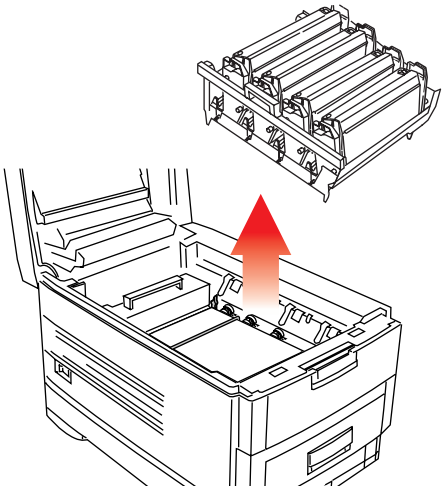
CAUTION!

- **Never expose image drums to light for more than 5 minutes.**
- **Always hold an image drum by the ends.**
- **Never expose image drums to direct sunlight.**
- **Never touch the green surface of the drum.**

4. Remove all four image drums as one unit in their cradle. Place the cradle on a *flat* surface. This prevents damage to the shiny green surface on the bottom of the drums.

a. Carefully remove any jammed paper from the transfer belt and top paper exit.

b. Replace all four image drums as one unit into the printer.



Paper Jams

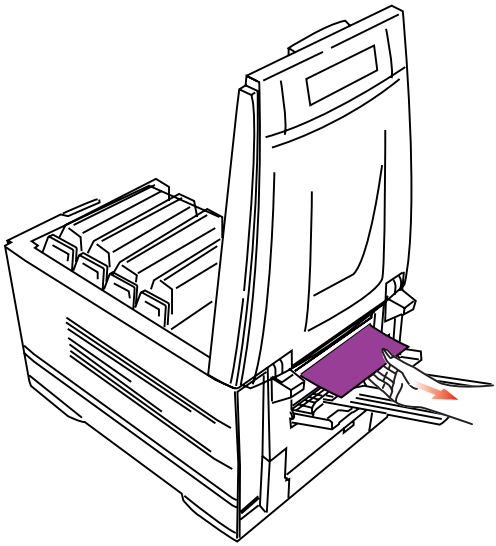
Clearing

Check behind the rear cover

5. Open the rear cover.

a. Remove any jammed paper.

b. Close the rear cover.



Paper Jams

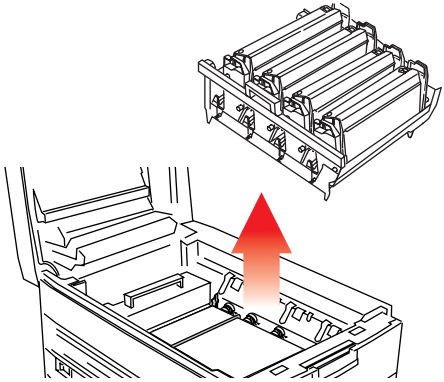
Clearing

Check the fuser unit

WARNING!

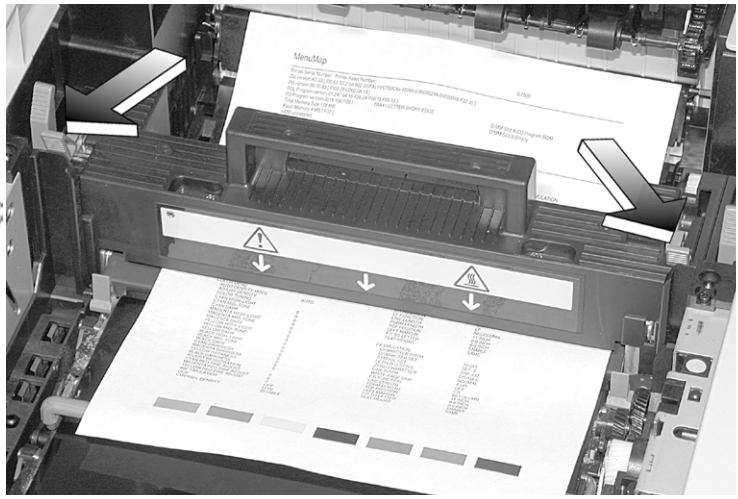
The fuser unit is very hot after printing. Always use the handle when lifting it.

a. If necessary, lift out the toner/drum cradle to access the jammed page.



b. Release the fuser roller lock levers at either end of the fuser and slowly remove the jammed paper.

c. Re-lock the levers at either end of the fuser.

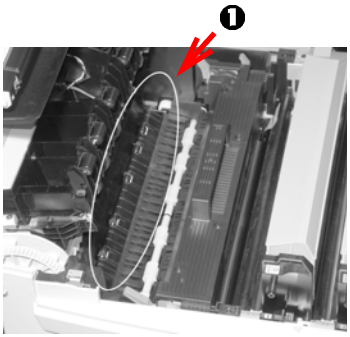


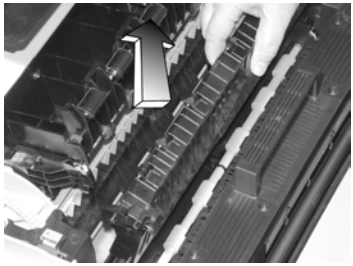
Paper Jams

Clearing

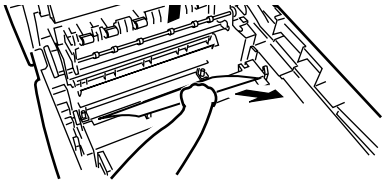
Check the paper separator

a. Release and lift the separator (1).

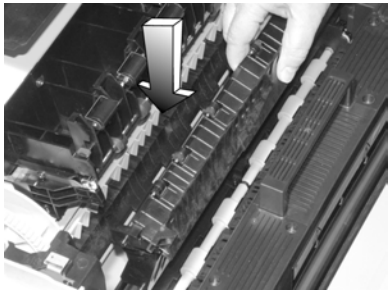




b. Remove any jammed paper from the printer.



c. Replace the separator.

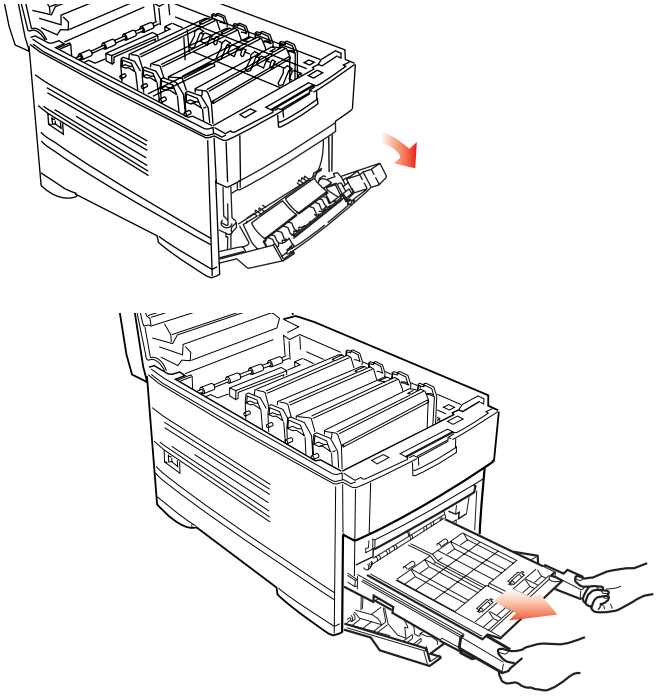


Paper Jams

Check the duplex unit

a. Open the front cover.

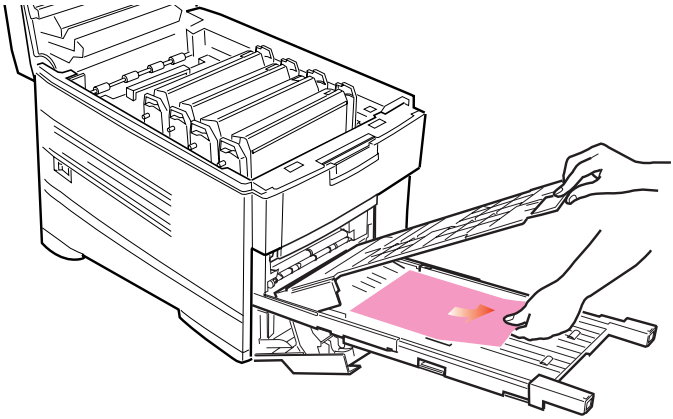
b. Slide out the duplex unit.



c. Open the duplex top cover and remove any jammed paper.

d. Close the duplex top cover and slide the duplex unit back into the printer.

e. Close the front cover.



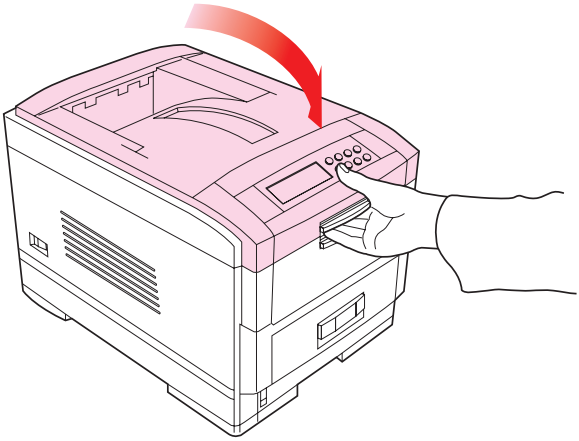
Paper Jams

Clearing

Check additional paper trays

If any optional paper tray(s) are installed:

6. Pull them out. Check that no paper is jammed along the various parts of the exit path.
7. Close the top cover.



Paper Jams

Examples of Paper Jams

Paper jams are frequent

More than one sheet feeds at a time

Paper curls

Paper feeds at an angle

Possible cause	Remedy
The printer is not horizontal.	Place the printer on a stable, level surface.
The paper is too thin.	Use the correct type of paper. See Specifications.
The paper is moist or affected by static.	Store paper within specified temperature and humidity levels.
The paper is creased or wrinkled.	Remove the creased/wrinkled paper from the feed tray.
The paper is not aligned correctly.	Adjust tray or manual feed guides.
Paper doesn't feed.	Correct paper feed selection in the printer driver.

Paper Jams

Printer does not print after jam is cleared

Possible cause	Remedy
The top cover was closed *before* all paper jams were cleared.	Removing a paper jam is not enough. The top cover cannot be closed until all of the paper jams are cleared. *Gently* open and close the top cover.

Print Quality Problems

Stripes: White

The stripes appear in the same direction as the paper was printed (moved through the printer).

Possible cause	Remedy
LED head is dirty.	Clean LED head with lens cleaner or soft tissue. See “Cleaning the LED heads” on page 502.
Toner is low.	Change toner cartridge. See “Changing the Toner Cartridge” on page 484.
Image drum damaged.	Change image drum. See “Changing the Image Drum” on page 491.

Stripes: Black

The stripes appear in the same direction as the paper was printed (moved through the printer).

Possible cause	Remedy
Image drum is damaged.	Replace image drum. “Changing the Image Drum” on page 491.
Toner is low.	Change toner cartridge. See “Changing the Toner Cartridge” on page 484.
Periodic black lateral lines or spots.	• If the lines or spots occur at intervals of approximately 44 - 94 mm, the image drum (green tube) is damaged or dirty. If damaged, replace the image drum cartridge. If dirty, wipe the image drum gently with soft tissue. If this does not work, replace the image drum. • If the lines or spots occur at intervals of approximately 113 mm, the fuser roller is damaged. Change the fuser unit. See “Changing the Fuser” on page 499.
The image drum has been exposed to light.	Remove the image drum from the printer and store it in a dark place for several hours. If this does not work, replace the image drum.

Print Quality Problems

Blurred letter edges

Possible cause	Remedy
LED is dirty.	Clean LED with lens cleaner or soft tissue. See “Cleaning the LED heads” on page 502.
Cannot print desired color because toner is low.	Replace toner cartridge. See “Changing the Toner Cartridge” on page 484.
Black formation method does not match application.	Open the printer driver and set black formation to CMYK. See “Printing Black” on page 31.

Print Quality Problems

Faded Output

Streaks

Possible cause	Remedy
LED head is dirty.	Clean LED head with lens cleaner or soft tissue. See “Cleaning the LED heads” on page 502.
Toner is low.	Change toner cartridge. See “Changing the Toner Cartridge” on page 484.
Paper is unsuitable for printer.	Use recommended paper. See Paper (Media)“Recommendations” on page 62.

Faded Output

Random Patches

Possible cause	Remedy
The paper is moist.	Store paper within specified temperature and humidity levels. See Paper (Media)“Recommendations” on page 62.

Faded Output

Print

Possible cause	Remedy
The toner cartridge is incorrectly installed.	Reinstall the toner cartridge. See “Changing the Toner Cartridge” on page 484.
Toner is low.	Change toner cartridge.
The paper is moist.	Store paper within specified temperature and humidity levels. See Paper (Media)“Recommendations” on page 62.
Paper is unsuitable for printer.	Use recommended paper. See Paper (Media)“Recommendations” on page 62.

Print Quality Problems

Shading on unprinted sections

Possible cause	Remedy
Paper has been affected by static electricity.	Store paper within specified temperature and humidity levels. See Paper (Media)“Recommendations” on page 62.
Paper is too thick.	Use recommended paper. See Paper (Media)“Recommendations” on page 62.
Toner is low.	Change toner cartridge. See “Changing the Toner Cartridge” on page 484.

Toner rubs off the output

Possible cause	Remedy
Media Weight and Media Type settings may not be appropriate.	Set the value of media weight to the next heaviest one. See Paper (Media)“Weight and Type” on page 58
Packing materials were left on the fuser when it was installed.	**Careful!** Fuser may be ***HOT***! Open the top cover and check to be sure that all the packing materials were removed from the fuser. To remove the fuser, see “Changing the Fuser” on page 499.

Output is garbled or incorrect

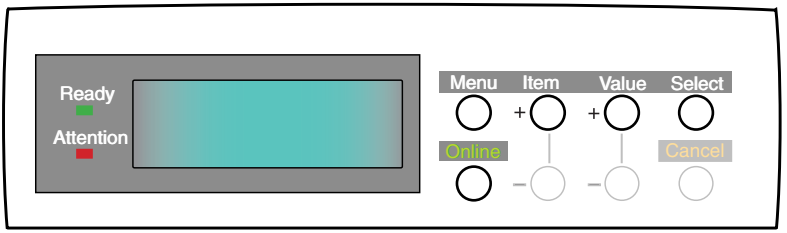
Possible cause	Remedy
Possible mismatch on parallel connection between computer and printer.	Change parallel transmission mode. See “Parallel Interface Problems” on page 528.

Parallel Interface Problems

Parallel Transmisssion Mode

The parallel port supports IEEE-1284 and ECP mode. If your computer's parallel port is not compatible with one of these modes, the printer may not print at all or it may print corrupted data.

To correct for this, enter the printer's Parallel Menu and change the ECP setting to Disable.



1. Press MENU until **PARALLEL MENU** displays
1. Press SELECT.
2. Press ITEM (either + or -) until **ECP** displays.
3. Press VALUE (either + or -) until **DISABLE** displays.
4. Press SELECT.
   An asterisk (*) appears to the right of the selected setting.
5. Press ONLINE. The printer goes online. ONLINE displays.

Parallel Interface Problems

Cannot configure for parallel connection

Windows only

Possible cause	Remedy
The computer does not support bi-directional parallel interface.	There is no solution for this problem. You must use a computer that supports a bi-directional parallel interface.
Parallel cable does not meet specifications.	Use a bi-directional parallel cable that meets the IEEE 1284–1994 specifications.
The interface is disabled.	Check that the parallel interface is set to enable.
Configuration procedure was not correctly followed or cancelled.	Configure again from the beginning.
Parallel cable is disconnected or faulty.	Reconnect or try another cable.
A converter, buffer or extension cable is being used.	Test by connecting printer and computer directly.

Parallel Interface Problems

Output is garbled or incorrect.

Windows only

Possible cause	Remedy
Possible mismatch on parallel connection between computer and printer.	Change parallel transmission mode (see Parallel Transmission Mode above).

USB Problems

Cannot configure for USB connection

NOTE

- **Windows 95 and NT 4.0 do not support USB.**
- **Windows 98 upgraded from Windows 95 may not support USB.**
- **Windows 98 original installation and Windows Me, 2000, and XP all support USB.**

Possible cause	Remedy
Computer does not support USB interface.	Check if there is a USB controller in the Windows device manager.
USB cable does not meet specifications.	Use USB cable to specification Ver.1.1.
Interface is disabled.	Check that USB interface is set to Enable.
Configuration procedure was not correctly followed or cancelled.	Configure again from the beginning.
USB cable is disconnected or faulty.	Reconnect or try another cable.
A USB hub is being used.	The printer cannot be used with a USB hub. Connect the printer and computer directly.

USB Problems

Cannot print

- **LPT WRITE ERROR** is displayed (Windows only).
- **PRNUSBX WRITE ERROR** is displayed.

Possible cause	Remedy
Interface is disabled. **(Windows only)**	In the printer menu settings, enable Parallel or USB interface. See “Parallel Menu” on page 100 or “Parallel Menu” on page 100 **(Windows only)**
Printer is switched OFF.	Switch ON.
Printer interface cable is disconnected.	Reconnect the printer interface cable.
A converter, buffer, extension cable or USB hub is being used.	Test by connecting the printer and computer directly.
Printer driver output port is incorrect.	Set correct output port to which the printer interface cable is connected.
Printer is not selected in the printer driver.	Select the printer or set to default printer.
Incorrect printer driver is being used.	Delete this printer driver and install correct printer driver.

Application Error

or

General Protection Fault

Possible cause	Remedy
Application is not suitable for Windows version. **(Windows only)**	Upgrade the application. **(Windows only)**
Memory is insufficient for number of applications running.	Close all other applications.
Print file is corrupted.	Correct or recreate the file.
Memory is insufficient for application.	Increase computer's memory. See "Memory (Additional)" on page 539
Insufficient free space on hard disk.	Delete unnecessary files.
Printer driver is incorrectly configured.	Correctly configure printer driver.

Paper Size Change request

Possible cause	Remedy
Paper loaded in tray is different size from that formatted in software application.	Either change paper in tray to match size formatted in application and press ONLINE to continue, or Continue printing on existing paper by pressing ONLINE.

Printer does not go online

Possible cause	Remedy
Bad connection	Turn off the printer. Disconnect the power cable. Reconnect power cable. Turn on the printer. If this does not clear the fault, call for service.

Printer makes a strange noise

Possible cause	Remedy
The printer is not horizontal.	Place the printer on a stable, level surface.
There are scraps of paper or other foreign matter inside the printer.	Check the inside of the printer and remove any such objects.
The top cover is not firmly shut.	Press the left and right sides of the top cover.

Printer takes a long time to start printing

Possible cause	Remedy
The printer has to warm up returning from power save mode.	In the printer menu settings, set power save to a higher value to increase the length of time before entering power save mode. See “POWER SAVE Mode” on page 45.
The printer is cleaning the image drum. This helps ensure good print quality. The cleaning process takes time.	Wait until this process has been completed.
The printer is adjusting the temperature of the fuser. This takes time.	Wait until this process has been completed.
The printer is processing data from another interface.	Wait until this data is processed.

Printing is slow

Possible cause	Remedy
Print processing is carried out by the computer.	Use a computer with a faster processor.
Print resolution is set high.	Set lower print resolution in the printer driver.
Data is too complex.	Simplify data.

Printing does not start

Possible cause	Remedy
Printer error	Check the control panel. If an error message is displayed, correct the problem.

Printing cancels

Possible cause	Remedy
The printer interface cable is faulty.	Replace the printer interface cable.
The time out setting is too short.	Reset time out to a higher value. See Manual Timeout and Wait TImeout items of the “System Configuration Menu” on page 86.

Accessories

Depending on the configuration of your printer, you may wish to add one or more of the following options as your needs evolve:

- Memory (see page 539)
- Hard Disk Drive (see page 545)
- Duplex Unit (see page 549)
- Paper Trays (see page 550)

Memory (Additional)

When to Install

Adding memory increases the printer's capacity to process complex data. You should add memory if:

- you use duplex printing
- error messages appear when printing complex data.
- you run graphic-intensive applications on Networks.

Available Amounts

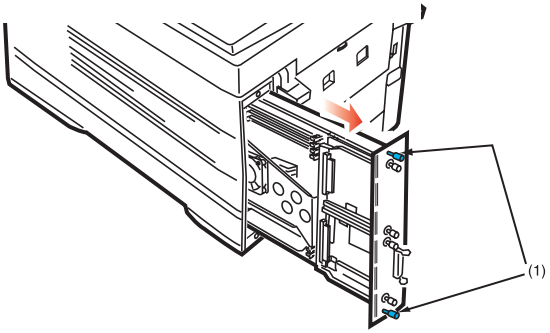
Additional Memory is available in modules of:

- 64Mb
- 128Mb
- 256Mb

Memory

How to Install

1. Turn off the printer.
2. Disconnect the power cable and printer interface cable.
3. Loosen the two screws (1) and remove the main board.



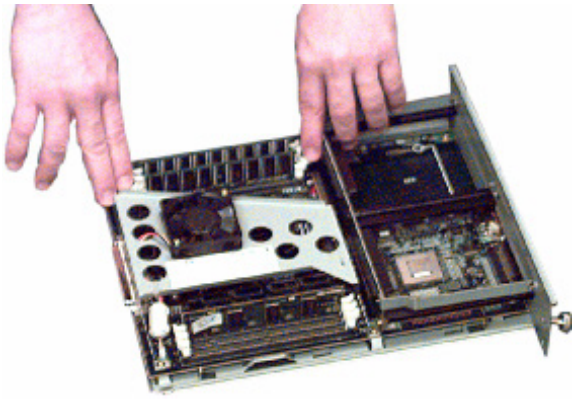
To insert the memory modules into the slots:

CAUTION!

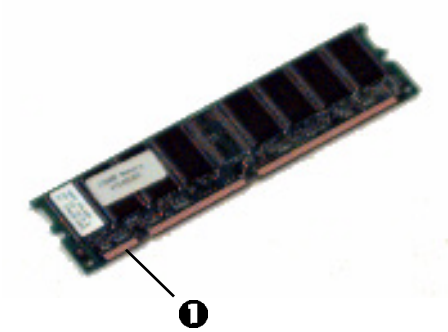
If you are installing three 256 MB modules (the maximum amount of memory), the memory modules that were originally installed *must* be removed.

The printer may not operate correctly if the modules are not firmly seated.

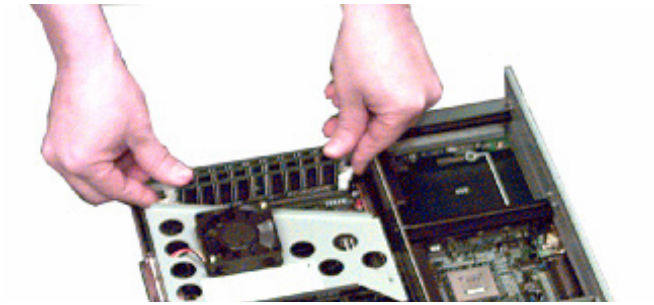
4. Push out the white tabs at either end of the socket.
5. Lift out the board.



6. Align the module with the narrow strip (1) on its metallic contact edge to the right (toward the slot identifier numbers) of the control board.



7. Carefully insert the module in the socket, placing the ends into the slot in the lock tabs. Press down firmly, until you feel the board engage the connector, then make sure the white tabs come up to lock the module in place.



8. Replace the main board and secure it with the two screws.
9. Connect the printer interface cable and power cable.
10. Turn on the printer.

NOTE

SERVICE CALL/034 may appear on the printer's display. If it does:

1. **Turn off the printer.**
2. **Remove the main board.**
3. **Make sure the memory modules are correctly installed.**
4. **Replace the main board.**
5. **Turn on the printer.**
6. **If SERVICE CALL/034 appears, repeat the above steps.**

7. Print a MenuMap.

To print the MenuMap:

a. Press MENU twice. **INFORMATION MENU** displays.

b. Press SELECT. **PRINT MENU MAP** displays.

c. Press SELECT. The Menu Map prints.

8. Check the Total Memory Size (shown at the top of the MenuMap).

It should match the memory now installed in the printer.

If it doesn't:

a. Turn the printer off.

b. Remove the main board.

c. Make sure that all of the modules are *firmly seated* in their connectors.

For Windows *only*:

9. In the printer driver(s), change the installed memory to match the new value:

– For Windows XP: see page 111
– For Windows 2000: see page 205
– For Windows Me/98/95: see page 302
– For Windows NT 4.0: see page 390

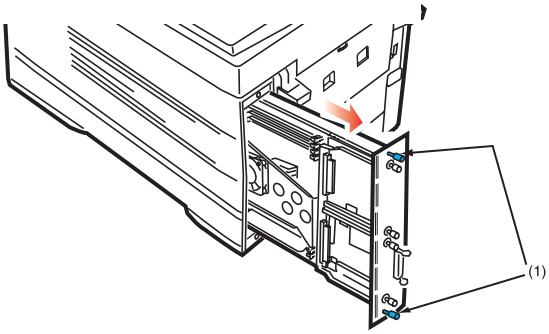
Hard Disk Drive

The optional internal hard disk drive is used to store documents for:

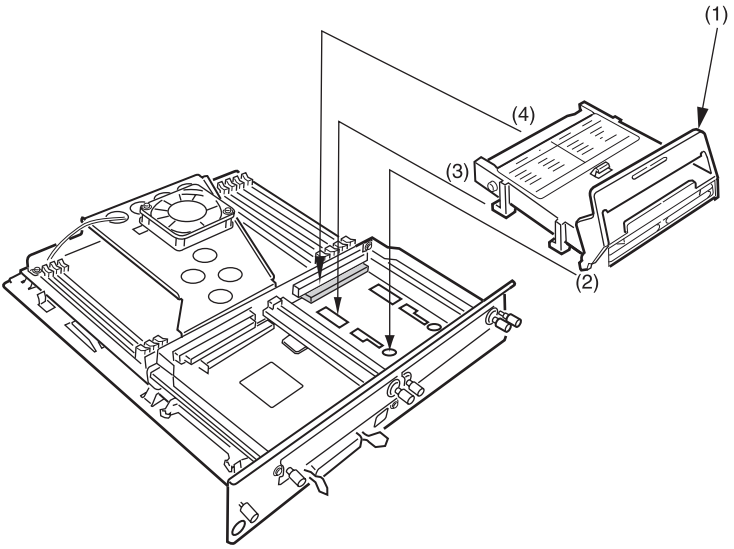
- proof and print
- password or secure printing

Installation

1. Turn off the printer.
2. Disconnect the power cable and printer interface cable.
3. Loosen the two screws (1) and remove the main board.



4. Hold the hard disk drive by the locking handle (1).
5. Insert the handle locating lugs (2) and four locating feet (3) into the holes in the main board making sure the hard disk connector (4) starts to engage with the socket on the control board.
6. *Gently* push down on the locking handle (1) making sure the hard disk moves forward and fully engages with the socket.



7. Replace the main board and secure it with the two screws.
8. Connect the printer interface cable and power cable.
9. Turn on the printer.

10. Print a MenuMap.
    To print the MenuMap:
    a. Press MENU twice. **INFORMATION MENU** displays.
    b. Press SELECT. **PRINT MENU MAP** displays.
    c. Press SELECT. The Menu Map prints.
11. Check that the HDD appears at the top of the MenuMap.
    If it doesn't,
    a. Turn the printer off
    b. Remove the main board
    c. Reseat the hard disk drive.
    d. Turn on the printer
    e. Print the MenuMap.
12. After installing the hard disk drive, the printer automatically initializes to include the option.

NOTE

- **When initializing the hard disk, any fonts, overlays or print jobs that have been acknowledged are erased.**
- **The Storage Device Manager can also be used to initialize the hard disk after installation. Please refer to the User Guide for the Storage Device Manager.**

For Windows *only*:

13. In the printer driver(s), change the installed memory to match the new value:
    – For Windows XP: see page 112
    – For Windows 2000: see page 206
    – For Windows Me/98/95 (PostScript driver only): see page 304
    – For Windows NT 4.0: see page 391

Hard Disk Drive

Initialize Automatically

After the hard disk drive is installed, the printer automatically initializes (configures) to include this option.

You can also manually initialize the HDD.

Initialize Manually

NOTE

- **When initializing the hard disk, any fonts, overlays or print jobs that have been stored are erased.**
- **You can also use Storage Device Manager to initialize the hard disk. For more information, please refer to the User Guide for the Storage Device Manager.**

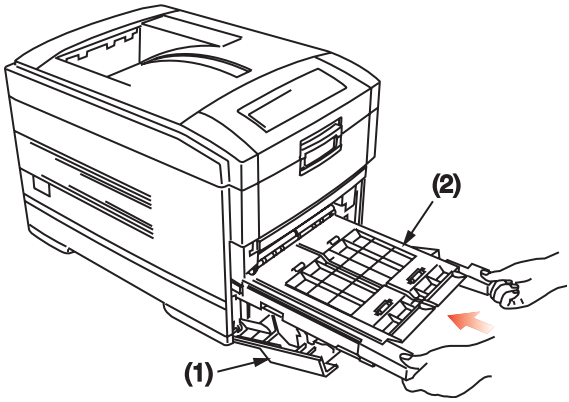
1. Press MENU until **DISK MAINTENANCE** displays.
2. Press SELECT.
3. Press ITEM (either + or –) until **HDD INITIALIZE** displays.
4. Press the SELECT button.
5. Press the ITEM button to shut down the printer.
6. Turn on the printer.

   The printer has to be turned off and on again to initialize the hard disk before use.

Duplex Unit

Installation

1. Turn off the printer.
2. Disconnect the power cable.



3. Open the front cover (1).
4. Insert the duplex unit (2) into the printer.
   Engage the sides of the duplex unit in the slots in the printer.
5. *Gently* slide the duplex unit (2) fully into the printer.
6. Close the front cover (1).
7. Connect the power cable
8. Turn on the printer.
9. The printer automatically configures to include this option.

For Windows *only*:

10. In the printer driver(s), change the installed memory to match the new value:
    – For Windows XP: see page 116
    – For Windows 2000: see page 210
    – For Windows Me/98/95 (PostScript driver only): see page 306
    – For Windows NT 4.0: see page 395

Paper Trays

Two additional paper trays can be installed.

When combined with the standard paper tray, paper capacity increases to approximately 1590 sheets.

Installation

1. Turn off the printer.
2. Disconnect the power cable and printer interface cable.

WARNING!

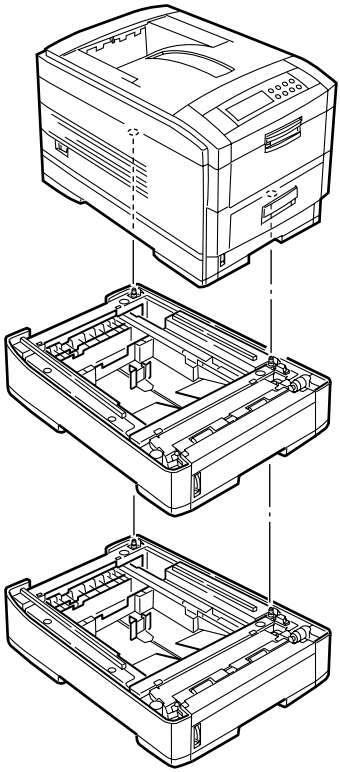
The printer weighs 106 lbs. (48 kg). 2 people are required to lift the printer safely and prevent any personal injury.

NOTE

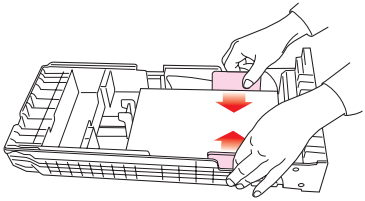
If installing both additional paper trays:

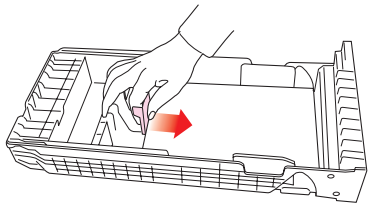
Put the two additional paper trays together as one unit *first*. *Then* install the printer on top of the two additional paper trays.

3. Move the printer away from its location.
4. Position the additional paper tray(s) where you want the printer to go.
5. Lower the printer *gently* on to the additional paper tray(s)
6. Align the holes and connection socket on the base of the printer with the locating pegs and connector on the additional paper tray unit.

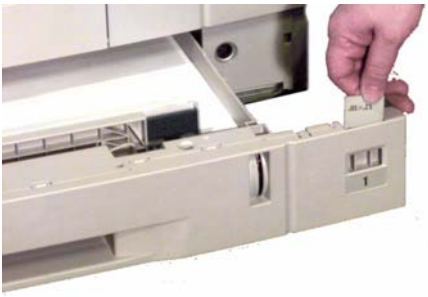


7. Load paper in each tray. Use the same procedure you use for loading paper in Tray 1. See “Loading Paper” on page 32.





8. Fold the tray media size identifier sheet to expose the appropriate media size. Insert it in the holder at the right end of the tray.
The label is supplied with the optional tray.



9. Place the appropriate self-adhesive tray number identifier label (2 or 3) on the lower rectangle at the right side of the tray.
The label is supplied with the optional tray.

10. Connect the printer interface cable and power cable.
11. Turn on the printer.
12. Print a Menu Map.
    To print the MenuMap:
    a. Press MENU twice. **INFORMATION MENU** displays.
    b. Press SELECT. **PRINT MENU MAP** displays.
    c. Press SELECT. The Menu Map prints.
13. Check that TRAY 2 (and TRAY 3 if installed) appear under MEDIA MENU.
14. The printer automatically configures to include this option.

For Windows *only*:

15. In the printer driver(s), change the installed memory to match the new value:
    – For Windows XP: see page 114
    – For Windows 2000: see page 208
    – For Windows Me/98/95 (PostScript driver only): see page 305
    – For Windows NT 4.0: see page 393

Specifications

Print method	LED exposed light source electronic photographic memory
Resolution	C7350n - 600 x 1200dpi C7550n - 1200 x 1200dpi
Colors	Cyan, magenta, yellow, black (CMYK)
CPU	Power PC 750 processor, 32 bit RISC CPU, 500 MHz, 64 bit
Memory	C7350n, C7550n - 192 Mb standard C7350hdn, C7550hdn - 320 Mb standard (Up to 1 Gb max with optional memory modules)
Print language	PostScript3, PCL5c
Internal font	PostScript 3, PCL5c fonts
Print Start	First print time: 8 sec (mono), 9 sec (color)
Parallel Interface	IEEE Std 1284-1994 parallel *Connection:* 36-pin receptacle *Cable:* IEEE Std 1284-1994 compatible cable of up to 1.8 meters *Transmission Mode:* Compatible, Nibble mode ECP *Interface Level:* • Low +0.0 – 0.8V • High +2.4 – 5.0V
Universal Serial Bus (USB) interface	USB specification Version 1.1 *Connection:* USB Type B *Cable:* USB specification Version 1.1 cable (shielded) *Transmission Mode:* Full speed (12 Mbps + 0.25% maximum)
Power control	Self-powered device
Network	100BASE-TX/10BASE-T (option)

Print speed in pages per minute (ppm) [Print speed varies with paper size, media weight and paper feed.]	Color: 24 ppm Mono: 26 ppm Duplex color: 13 ppm
Media size **Trays 1, 2, 3**	Letter, Legal-14, Legal-13.5, Legal-13, Executive A4, A5, B5 A6: *Tray 1 only*
Media size **MP tray**	Letter, Legal-14, Legal-13.5, Legal-13, Executive A4, A5, A6, B5 Envelopes: C5, DL, Com-9, Com-10, Monarch Custom (up to 1200 mm length)
Media weight	*Trays 1 to 5*: 20 to 47 lb. US Bond (75 to 177 g/m^2) *Multi-purpose tray*: 17 to 54 lb. US Bond—up to 113 lb. Index—(64 to 203 g/m^2) *Duplex unit*: 20 to 28-lb. US Bond (75 to 105 g/m^2)
Paper capacity (depending on paper weight)	Paper tray: 530 sheets approx. Manual feed: 100 sheets approx.
Exit capacity (depending on paper weight)	Face up: 100 sheets approx. Face down: 500 sheets approx.
Print margin	¼-inch (6.4 mm) minimum
Print accuracy	*Start*: ±2 mm *Paper skew*: ±1 mm per 100 mm *Image expansion/compression*: ±1 mm per 100 mm
Startup time	Less than 3 min. from powering up (25°C)
Power supply	120 (115-127) volts AC, 60 Hz ± 2 Hz *OR* 230 (198-264) volts AC, 50 Hz ± 2 Hz

Power consumption

Operating: 1350 max.; 500 W average (25°C)
Standby: 1200 max.; 150 W average (25°C)
Power saving: 45 W max.

Operating environment

Operating:

- 50 to 90°F (10 to 32°C)
- 20 to 80% RH

maximum wet bulb temperature 77°F (25°C)

For maximum print quality

- 62.6 to 80.6°F (17 to 27°C)
- 50 to 70% RH

Off

- 32 to 110°F (0 to 43°C)
- 10 to 90% RH

Storage

- -14 to 110°F (-10 to 43°C)
- 10 to 90% RH

Product life

5 years or 600,000 sheets

Dimensions

Width: 16.9 inches (430 mm)
Depth: 24.4 inches (620 mm)
Height: 16.9 inches (430 mm)

Weight

106 lbs. (48 kg) not including optional accessories and paper

Consumables

Toner

Description	Order No.
Black Toner	41963004
Cyan Toner	41963003
Magenta Toner	41963002
Yellow Toner	41963001

Drums

Description	Order No.
Black Image Drum	41962804
Cyan Image Drum	41962803
Magenta Image Drum	41962802
Yellow Image Drum	41962801

Fuser Units

Description	Order No.
Fuser Unit, 120V	41945601

Fuser Unit, 230V 41945607

Transfer Belt

Description	Order No.
Transfer belt	41945501

OKI® Print Media

OKI SynFlex™

Waterproof and Tear proof

	Order No.
White, 8½ x 11''. 100 sheets	52205901

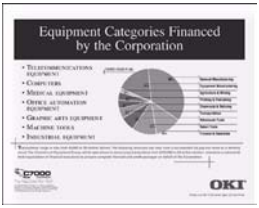
OKI Bright White Proofing Paper

	Order No.
32-lb. US Bond, 8½ x 11''. 500 sheets	52206101

OKI Premium Card Stock

	Order No.
White, 60 lb. Cover, 8½ x 11''. 250 sheets	52205601
White, 90 lb. Index, 8½ x 11''. 250 sheets	52205602
White, 110 lb. Index, 8½ x 11''. 250 sheets	52205603

OKI Premium Color Transparencies



	Order No.
8½ x 11''. 50 sheets	52205701

OKI® Print Media (continued)

OKI Premium Envelopes

Security Tint, Redi-Strip Seal

	Order No.
White, COM-10. Box 100	52206301
White, COM-10. Box 500	52206302

Factory Default Settings

Print Menu

Item	Factory default setting
COPIES	1
DUPLEX	OFF
BINDING	LONG EDGE
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	FEED WHEN MISMATCHING
MEDIA CHECK	ENABLE
TRANSPARENCY DETECT	AUTO
RESOLUTION C7350 C7550	 600 X 1200 dpi FAST 1200 dpi
TONER SAVE MODE	OFF
MONO-PRINT SPEED	AUTO
ORIENTATION	PORTRAIT
LINE PER PAGE	60
EDIT SIZE	CASSETTE SIZE

Media Menu

Item	Factory default setting
TRAY1 MEDIATYPE:	PLAIN
TRAY1 MEDIAWEIGHT	AUTO
TRAY2 MEDIATYPE:	PLAIN
TRAY2 MEDIAWEIGHT	AUTO
TRAY3 MEDIATYPE:	PLAIN
TRAY3 MEDIAWEIGHT	AUTO
MPP TRAY PAPERSIZE	LETTER
MP TRAY MEDIA	PLAIN
MP TRAY MEDIAWEIGHT	AUTO
UNIT OF MEASURE	INCH
X DIMENSION	8.5 INCH
Y DIMENSION	11 INCH

Color Menu

Item	Factory default setting
AUTO DENSITY MODE	AUTO
ADJUST DENSITY	[EXECUTE]
COLOR TUNING	[PRINT PATTERN]
CYAN HIGH-LIGHT	0
CYAN MID-TONE	0
CAN DARK	0
MAGENTA HIGH-LIGHT	0
MAGENTA MID-TONE	0
MAGENTA DARK	0
YELLOW HIGH-LIGHT	0
YELLOW MID-TONE	0
YELLOW DARK	0
BLACK HIGH-LIGHT	0
BLACK MID-TONE	0
BLACK DARK	0
CYAN DARKNESS	0
MAGENTA DARKNESS	0
YELLOW DARKNESS	0
BLACK DARKNESS	0
ADJUST REGISTRATION	[EXECUTE]
CYAN REG FINE ADJUST	0
MAGENTA REG FINE ADJUST	0
YELLOW REG FINE ADJUST	0
INK SIMULATION	OFF
INK LIMIT	DARK
CMY100% density	DISABLE

System Configuration Menu

Item	Factory default setting
POWER SAVE DELAY TIME	60 mins.
USB PS-PROTOCOL	RAW
NETWORK PS-PROTOCOL	RAW
PERSONALITY	AUTO EMULATION
CLEARABLE WARNING	ON
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 sec.
WAIT TIMEOUT	40 sec.
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
LANGUAGE	ENGLISH

PCL Emulation Menu

Item	Factory default setting
FONT SOURCE	RESIDENT
FONT No.	I000
FONT PITCH	10.00 cpi
FONT HEIGHT	12.00 point
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 column
WHITE PAGE SKIP	OFF
CR FUNCTUION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
TRUE BLACK	OFF
PEN WIDTH ADJUST	ON

PPR Emulation Menu

Item	Factory default setting
CHARACTER PITCH	10 cpi
FONT CONDENSE	10 cpi to 12 cpi
CHARACTER SET	SET - 2
SYMBOL SET	IBM-437
LETTER 0 STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 lpi
WHITE PAGE SKIP	OFF
CR FUNCTUION	CR
LF FUNCTION	LR
LINE LENGTH	80 column
FORM LENGTH	11 inches
TOF POSITION	0.0 inch
LEFT MARGIN	0.0 inch
FIT TO LETTER	ENABLE
TEXT HEIGHT	SAME

FX Emulation Menu

Item	Factory default setting
CHARACTER PITCH	10 cpi
CHARACTER SET	SET - 2
SYMBOL SET	IBM-437
LETTER 0 STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 lpi
WHITE PAGE SKIP	OFF
CR FUNCTUION	CR
LINE LENGTH	80 column
FORM LENGTH	11 inch
TOF POSITION	0.0 inch
LEFT MARGIN	0.0 inch
FIT TO LETTER	ENABLE

Parallel Menu

Item	Factory default setting
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK-IN-BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE

USB Menu

Item	Factory default setting
USB	ENABLE
SOFT RESET	DISABLE
OFFLINE RECEIVE	DISABLE

Network Menu

Item	Factory default setting
TCP/IP	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
NETBEUI	ENABLE
FRAME TYPE	AUTO
DHCP/BOOTP	ENABLE
RARP	DISABLE
IP ADDRESS	0.0.0.0
SUBNET MASK	0.0.0.0
GATEWAY ADDRESS	0.0.0.0
PRINT SETTINGS	OFF
INITIALIZE	OFF

Memory Menu

Item	Factory default setting
RECEIVE BUFF SIZE	AUTO
RESOURCE SAVE	OFF
FLASH INITIALIZE	EXECUTE
PS FLASH RESIZE	0.5MB

Disk Maintenance Menu

Item	Factory default setting
PARTITION #1	PCL
PARTITION #2	COMMON
PARTITION #3	PS

System Adjust Menu

Item	Factory default setting
X ADJUST	0.0 mm
Y ADJUST	0.0 mm
DUPLEX X ADJUST	0.0 mm
DUPLEX Y ADJUST	0.0 mm
TRAY1 LEGAL14 PAPER	LEGAL 14
TRAY2 LEGAL14 PAPER	LEGAL 14
TRAY3 LEGAL14 PAPER	LEGAL 14
PCL TRAY2 ID#	5
PCL TRAY3 ID#	20
PCL MP TRAY ID#	4
HEX DUMP	EXECUTE

Maintenance Menu

Item	Factory default setting
EEPROM RESET	EXECUTE
POWER SAVE	ENABLE
PAPER BLACK SETTING	0
PAPER COLOR SETTING	0
TRANSPR BLACK SETTING	0
TRANSPR COLOR SETTING	0

Color Swatch Utility

General Information

The Color Swatch Utility allows you to

- print color samples (swatches) on your color printer.
- create custom color swatches

The swatches are used with your software program to select and reproduce color accurately.

The swatches represent selected samples of the printer's color palette. Use the swatches to find the desired colors for your printed documents.

Load this program from the Menu Installer located on CD1.

NOTE

- **The Swatch Utility does not guarantee that the printer prints the same color as displayed on your monitor. Consider the displayed color as a reference.**
- **The printer may not be able to print the exact color that you desire.**
- **Your software may not be able to match colors using the swatch information. You may need to use other matching methods.**
- **The color swatch samples do not show all the colors your printer can print.**
- **Other factors influence how you see color: the color and finish of the paper, ambient light, even the color surrounding the one you are looking at.**

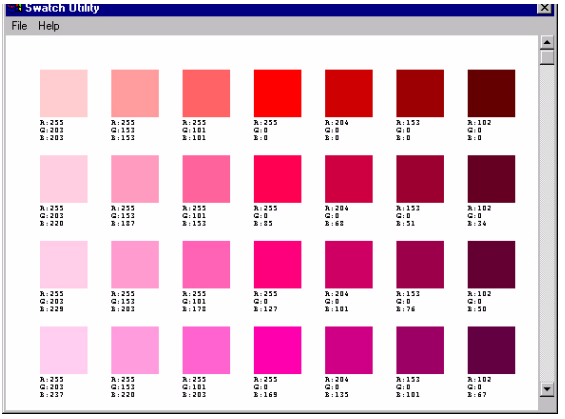
Color Swatch Utility

Printing Color Swatches

NOTE

- **The color swatch samples do not show all the colors your printer can print.**
- **The Swatch Utility does not guarantee that the printer prints the same color as displayed on your monitor. Consider the displayed color as a reference.**
- **The printer may not be able to print the exact color that you desire.**

1. Install the utility from CD1 using the OKI Menu Installer (Windows).
2. Click **Start** → **Programs** → **Color Swatch** → **Color Swatch Utility**.
3. A swatch page displays, showing commonly used colors.
4. Select print to print sample pages.



5. Use the color blocks to pick the specific colors that you want to appear in your printed document.

   Each color block, or sample, is identified with information your software package needs to reproduce that color accurately.

   The numbers under each block specify the amounts of the primary colors—red (R), green (G), and blue (B)—that mix to form each particular shade.

   The amounts are given as a numerical value between 0 and 255.

Color Swatch Utility

Creating Custom Swatch Colors

NOTE

- **The Swatch Utility does not guarantee that the printer prints the same color as displayed on your monitor. Consider the displayed color as a reference.**
- **The printer may not be able to print the exact color that you desire.**

If you don't find your desired color, you can create or customize colors:

1. Select **Custom Swatch** from the **File** menu.
2. On the pop-up window, there are 3 slide bars that allow you to customize swatches:
   - **Hue** bar changes the hue of the swatches, for example, red to green or blue to yellow.
   - **Saturation** bar changes vividness.
   - **Lightness** bar changes darkness.
3. Adjust the bars until you see the desired color.
   Color variations are created to help you find the best match.
4. Click **OK.**
5. Print the custom swatch page.
6. Repeat these steps until you find the desired printed color.
7. For additional information, see the Swatch Utility Read-me file located in the Windows Programs list.
   The file includes:
   - Applying Color Value in your Application
   - Setting Monitor Color

PDF Direct Print Utility

General Information

PDF Direct Print allows you to send a selected PDF file directly to the printer.

This is faster and easier than using Adobe Acrobat separately before printing.

PDF Direct Print also lets you set paper source, copies, 2-sided printing, print page range and other settings.

Load this program from the Menu Installer located on CD1.

Requirements for Use

- An optional built-in hard disk must be installed (standard on hdn models).
- Supports version PDF 1.3 (Acrobat 4.0) or below.
- A font environment on your system.

NOTE

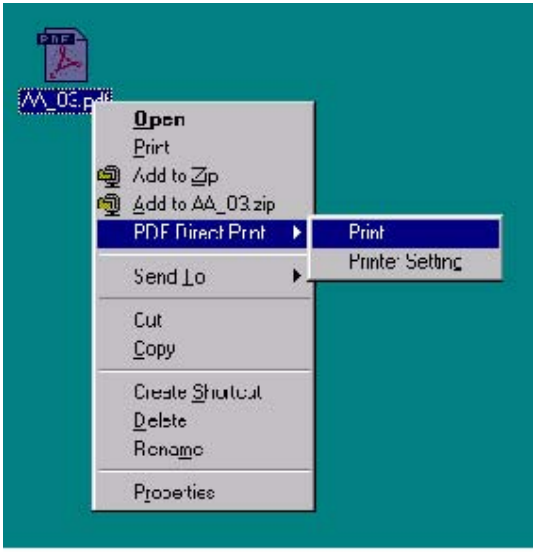
Some PDF files may not be able to print correctly.

Using

NOTE

The PDF Direct Print Utility works with version 1.3 (Acrobat 4.0) or below PDF files.

1. Right-click on
   the file you want to print in Windows Explorer
   or
   the file icon on the Desktop.
2. Click **PDF Direct Print**
3. Click **Print**.



4. The **Start** screen appears.
   It allows you to change the settings of the following features:
   - Select Print
   - Paper Source
   - Copies
   - 2-sided printing
   - Binding
   - Collate
   - Fit to page
   - Print page range
   - Restore Default
   - Save Settings
   - Print
   - Cancel
   - Help
   - About
5. If “ERROR:PDF to PS conversion failed” displays, the file contains an embedded font not installed on the system. Using Acrobat, delete the text that is embedded, or unembed the embedded font.
   In Acrobat, select **Tool** →**Touchup** →**Text attribute**.
   Remove the checkmark in the **Embed** box.
6. For additional information, see the PDF Print Direct **Help** file in the PDF Direct Print Utility.

Storage Device Manager for Windows

General Information

This Utility lets you manage the printer's hard disk and flash memory, and download fonts, macros and firmware.

Storage Device Manager (SDM) provides a means of managing

- The printer's internal hard disk drive (standard on all hdn models): 20 GB [partitioned as Common, PCL and PostScript].
- The printer's flash memory (2 MB).
- Using the software improves the internal performance of the printer and provides a tool for downloading files from the computer to the printer's memory, including
  - Overlays such as logos, addresses, etc.
  - Graphic files
  - Forms such as letterheads, invoices, etc.

Load this program from the Menu Installer located on CD1.

NOTE

Storage Device Manager requires Microsoft Internet Explorer 4.0 or higher to run.

The printer's internal hard drive does not communicate directly back to the Storage Device Manager software.

Any error messages appear on the printer display.

If things seems to be "stuck," go to the printer and check the display.

Summary of Functions

- Create or modify a project.
- Download files to a printer.
- Add or remove printers being administered.
- Reboot the printer.
- Manage the Proof & Print and Secure Print spooler queues on the internal hard drive.
- Delete files from the internal hard disk or from the flash memory.
- View the status, configuration and variables for a printer.
- Print the demo page, PCL fonts list, or PostScript font list from a printer.
- Print one or more PCL format macros or PostScript forms (Overlays).

Installation

Install Storage Device Manager from CD1 Using the Oki Menu Installer.

Getting Help

NOTE

The printer's internal hard drive does not communicate directly back to the Storage Device Manager software.

Any error messages appear on the printer display.

If things seems to be "stuck," go to the printer and check the display.

The Oki Storage Device Manager software contains an online Help system.

To access it from the main Storage Device Manager screen, click **Help Topics** from the **Help** pull-down menu.

To access it from other Storage Device Manager screens, click the **Help** button.

NOTE

Storage Device Manager requires Microsoft Internet Explorer 4.0 or higher to run.

Network Administrator Functions

On network systems, the Network Administrator

- oversees the Storage Device Manager software
- uses Storage Device Manager to manage and monitor the printer's internal hard disk and flash memory

The Administrator's Functions Feature lets you:

- set up the Administrative Password.
- establish 4-digit PIN numbers for each client, using any four numbers from 0 through 7 (8 and 9 cannot be used).
- reboot the printer.
- delete files (Show Resources is preferable).
- format the internal hard drive.

Network Administrator Functions

Notes and Cautions

NOTES

PIN Numbers

Clients can choose their own PIN numbers.

The administrator must know these PINs in order to access client information.

CAUTION!

Deleting Files

With Show Resources, you can browse to the file, click it, click Delete, then click OK to confirm the deletion.

Using Administrator Functions to delete a file requires that you print out a File List, then use the information in the File List to type in the exact path (case sensitive) to the file. The file is deleted without confirmation.

Format the Hard Drive

You can also use Storage Device Manager to format the partitions on the printer's hard drive.

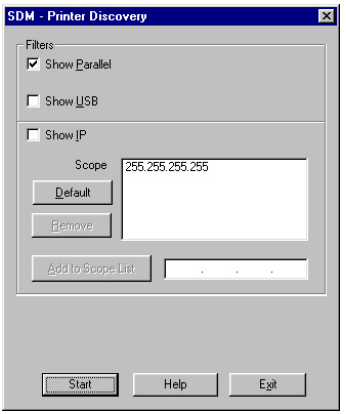
Remember: this erases the contents of the partition and can cause serious problems.

Use Show Resources and HDD Print Jobs to maintain the disk.

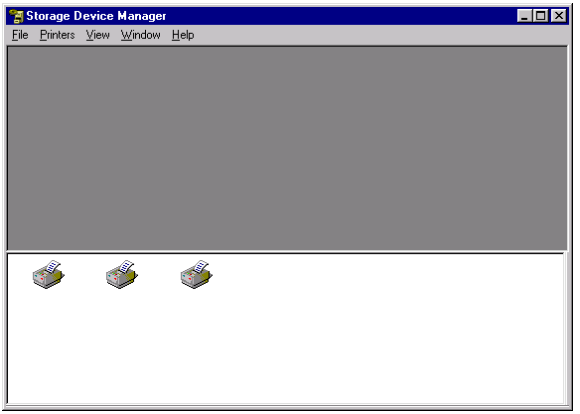
Using

Opening the Program

1. Click **Start** → **Programs** → **Oki** → **Oki Storage Device Manager** → **Oki Storage Device Manager**.
   The SDM - Printer Discovery dialog box opens.

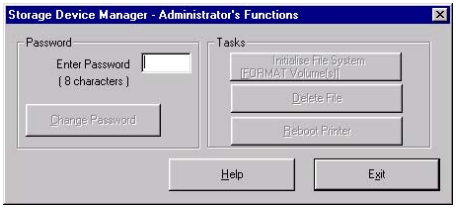


2. Select the appropriate computer connection(s), then click **Start**.
   The printer searches for connected printers and places icons in the window at the bottom of the dialog box.
3. Click **Exit**.
   The Storage Device Manager dialog box opens.



Setting Up an Administrative Password

1. With the Storage Device Manager program open, click **Administrator Functions** in the **Printers** menu.



NOTE

Passwords consist of eight digits, letters or numbers, and are case sensitive.

2. Type in the default password (p1xs7d0m) under **Enter Password**, then click **Change Password**.
3. Type the 8-digit, alpha-numeric password of your choice under **New Password**.
4. Type the password again under **Confirm New Password**. *New Password Accepted appears.*
5. Click **OK**.
6. Click **Exit** twice.

Forms

PostScript

NOTE

Use PostScript forms if you are not experienced with PCL Macro commands.

Step 1: Create the Form

Step 2: Create a Project

Step 3a: Add Files to the Project

Step 3b: Delete Files from the Project

Step 4: Store the Files

Step 5: Save and Download the Project

Step 6: Test Print the Form

Important!

Remember that file names and paths are case sensitive.

Forms

PostScript

Step 1: Create the Form

1. Create the document in your software application.
2. Click **File** → **Print** and make sure the Oki PostScript driver is selected.
3. Select **Print to file**.
4. Engage the Encapsulated PostScript (EPS) output option.
   Windows Me/98/95:
   - Click **Properties** (or your application's equivalent).
   - Click the PostScript tab. If it is not already selected, click **Encapsulated PostScript (EPS)**.

   Windows NT 4.0:
   - Click **Properties** (or your application's equivalent).
   - Scroll down to **PostScript Options** and click it. Click **PostScript Output Option**. Select **Encapsulated PostScript (EPS)**.
5. Click **OK**.
6. Print the document to a file using the extension PRN.

Forms

PostScript

Step 2: Create a New Project

1. Open Storage Device Manager.
2. Click **Projects** → **New Project**.
   The Project dialog box opens.
3. Click **Projects** → **Save Project**, enter the path/name for storing the project on your hard drive or your network, then click **Save**.

Forms

PostScript

Step 3a: Add Files to the Project

1. Click **Projects** → **Add File to Project**.
   The Open dialog box appears.
2. Make sure **PRN files (*.prn)** is selected in the **Files of type** drop-down list.
3. Browse to the folder where the files are saved. Select the files you wish to add to the project. Click **Open**.
   The Information dialog box appears.
4. Click **OK**.
   The files are saved as HST.
5. Repeat steps 1 through 4 until you have added all the files you wish to add to the Project.

Step 3b: Delete Files from the Project

NOTE

To delete a file from the project, click the file name, then click Projects →Remove File from Project.

Forms

PostScript

Step 4: Store the Files

Hard Disk Drive

If your printer is equipped with an internal hard disk drive, the Storage Device Manager automatically saves the forms to the PostScript partition on the hard drive.

Flash Memory

If your printer does not have an internal hard disk drive, the Storage Device Manager automatically stores the forms in the PostScript section of the Flash memory.

To store the forms in the Flash memory instead of on the hard disk drive:

1. Double-click the file name in the Project window.
   The Edit Component Name and ID dialog box appears.
2. Under **Volume**, type in%Flash0%, then click **OK**.

Forms

PostScript

Step 5: Save the Project and Download it to the Printer

1. Click **Projects** → **Save Project**.
2. Click **Projects** → **Send Project Files to Printer**.
   Command Issued appears.
3. Click **OK**.

Forms

PostScript

Step 6: Test Print the Form

1. With Storage Device Manager open and the appropriate printer icon highlighted, click **Print**ers → **Test Form**.
   The Test PostScript Form dialog box appears.
2. Click the file name for the form you wish to print (you can get this from the File List printout). Click **OK**.
   Command Issued appears.
3. Click **OK** and wait for the form to print.

Forms

PCL

Important!

Unless you are experienced with PCL macro commands, it is best to stay with the PostScript Forms.

Here are the processes to producing PCL macros:

Step 1: Create the Form

Step 2: Create a Project

Step 3: Convert the Form

Step 4a: Add Files to the Project

Step 4b: Delete Files from the Project

Step 5: Check the Settings and Save the Project

Step 6: Download the Project

Step 7: Test Print the Form

Forms

PCL

Important!

Remember that file names and paths are case sensitive.

Step 1: Create the Forms in Your Software Application

1. Create the document in your software application.
2. Click **File** → **Print** and make sure the Oki PCL driver is selected.
3. Print the document to a file using the extension PRN.

Step 2: Create a New Project

1. Open Storage Device Manager.
2. Click **Projects** → **New Project**.
   The Project dialog box opens.
3. Click **Projects** → **Save Project**, enter the path/name for storing the project on your hard drive or your network, then click **Save**.

Forms

PCL

Step 3: Convert the Files to Binary (.bin) Format

1. Click **Projects** → **Filter Macro File**.
   The Filter Printer Patterns dialog box appears.

2. Make any adjustments in the settings.

> ***Example***
>
> If you create a black oval in MS Paint, and leave all the color command filters checked, the black oval prints as a black rectangle when the overlay is used.
>
> To maintain the oval shape, turn off (deselect) the "Configure Image Data," "Palette ID," and "Palette Control" filters.

3. Click **OK**.
   The Open dialog box appears.
4. Make sure **Print spool files (*.prn)** is selected in the **File of type** drop-down list.

Forms

PCL

Step 3: Convert the Files to Binary (.bin) Format

5. Under **Look in**, go to the folder where the files are saved and double-click the file name.
   The file is saved as a bin file. Filter File Created appears.
6. Click **OK**.
7. Repeat steps 1 through 6 until you have converted all the files you wish to add to the project.

Forms

PCL

Step 4a: Add Files to the Project

1. Click **Projects** → **Add File to Project**.
   The Open dialog box appears.
2. Highlight the.bin file you wish to add. Click **Open**.
   The file name appears in the Project dialog box.
3. Repeat steps 1 and 2 until all the files you wish to include in the project appear in the Project dialog box.

NOTE

An alternate way to add files to the project is:

1 Open either My Computer or Microsoft Explorer.

2 Browse to the directory where the prn files are stored.

3 Select the files and drag them into the Project box.

Step 4b: Delete Files from the Project

To delete a file from the project:

1. Click the file name.
2. Click **Projects** → **Remove File from Project**.

Forms

PCL

Step 5: Check File Settings and Save the Project

1. To check the settings for the bin files, double-click the file name.
   The Edit Component Name and ID dialog box appears.
   Here you can edit the
   - file name
   - ID number (the number you need to enter in the printer driver when printing overlays)
   - volume:

     0: = printer's disk drive PCL partition

     1: = printer's disk drive Common partition

     %disk0%: = printer's disk drive PostScript partition

     2: = Flash memory PCL

     %Flash0% = Flash memory PostScript
   - path.
2. Click **OK**.
3. When you're through reviewing the settings, click **Projects** → **Save Project**.

Forms

PCL

Step 6: Download the Project

1. Click **Projects** → **Send Project Files to Printer**.
   Command Issued appears.
2. Click **OK**.

Forms

PCL

Step 7: Test Print the Form

1. With Storage Device Manager open and the appropriate printer icon highlighted, click **Printers** → **Test Macro**.
   The Test Macro dialog box appears.
2. Enter the ID number for the macro file you wish to print.
   You can get this from the File List printout.
   Look under Volume 0.

   Example: for 2:OKI.BIN, enter 2
3. Click **OK**.
   Command Issued appears.
4. Click **OK** and wait for the macro to print.

Printing the File List

Using Storage Device Manager

To print a list of files in the printer's memory:

1. Open Storage Device Manager.
2. Click **Printers** → **Print File Listing**.
   Command Issued appears.
3. Click **OK** and wait for the File List to print.

From the Control (Front) Panel

NOTE

To print the File List from the control (front) panel:

- **Press MENU until INFORMATION MENU appears.**
- **Press ITEM (either + or -) until PRINT FILE LIST appears.**
- **Press SELECT.**

Internal Hard Disk Drive: Maintenance

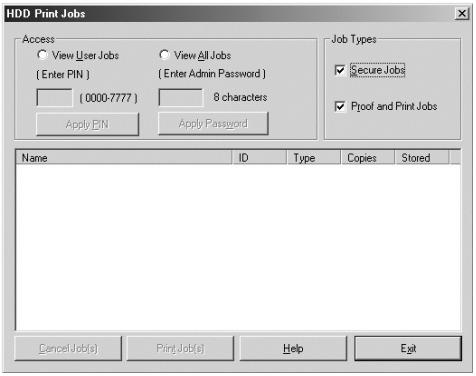
Flash Memory: Maintenance

View and Delete Files

HDD Print Jobs Feature

The HDD Print Jobs feature allows you to view and delete the Proof & Print and Secure Print files stored on the printer's internal hard drive.

1. Open Storage Device Manager. Click the icon for the printer whose contents you wish to view.
2. Click **Printers** → **HDD Print Jobs**.
   The HDD Print Jobs dialog box appears.



3. Under **Job Types**, select
   Secure Jobs to view Secure Print jobs
   and/or
   Proof and Print Jobs to view Proof & Print jobs.

4. To view
   the jobs stored for a particular client:
      a. Select **View User Jobs** under **Access**
   b. Type in the client's 4-digit User PIN
   c. Press **Enter**.
   all stored jobs:
      a. Select **View All Jobs**
   b. Type in your Administrator's Password
   c. Press Enter.
5. Delete the files.

Important!

You are not prompted to confirm the deletion.

- Click **Cancel Job(s)** to delete the files without printing them.
- Click **Print Job(s)** to print the files out before they are automatically deleted.

Internal Hard Disk Drive: Maintenance

Flash Memory: Maintenance

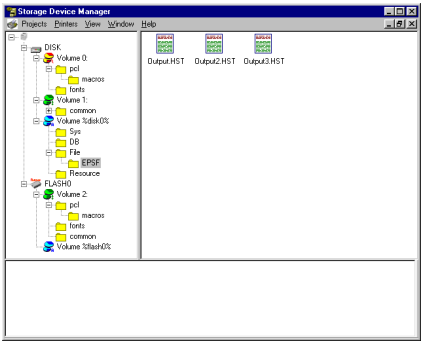
Delete Files

Show Resources Feature

Use the Show Resources feature to delete files from the internal hard drive and flash memory.

1. Open Storage Device Manager. Click the icon for the printer whose contents you wish to view.
2. Click **Printers** → **Show Resources**.

Show_clr_C53_oem.bmp



3. Click the file(s) to be deleted.
   Press Shift to select a span of files.
   Press Ctrl to select additional files).
   - PCL Macro files are under

     Volume 0 (internal hard drive)

     or

     Volume 2 (flash memory)

   - PostScript Forms are under

     Volume &disk0% (internal hard drive)

     or

     %flash0% (flash memory)
4. Click **Printers** → **Delete File(s)**.
5. Click **Yes** to confirm the deletion.
6. Close the dialog box.

Overlays

What are Overlays?

An overlay is a combination of graphics, fonts, or text that is stored and printed whenever required.

An overlay is stored in the printer's flash memory or on the hard disk (supplied on some models, optional on others).

An overlay is similar to a watermark. However, an overlay can be much more elaborate than a watermark.

Overlays can

- replace as pre-printed stationery
- add your logo or company address to a document
- create forms.

When to Use Overlays

Use overlays to print letterheads, forms, or invoices.

Using overlays can reduce the need for pre-printed stationery.

Example of Using Overlays

Use the Storage Device Manager to create and store three files in the printer:

- the company logo
- the company address
- the company mission statement.

Use the Overlay feature to place these files into your document.

You can use the files in many different combinations, according to your changing requirements.

Overlays

Creating Files for Overlays

The files to be used as overlays must be created, generated, and stored.

Then, other users can use settings in the printer drivers to use the files as overlays in documents.

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead).
2. Use the printer driver to generate a PRN file (print file).
3. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format.
4. Download the storable file to the printer.

Overlays

Requirements for Using

Read This First

Important!

1. An overlay may consist of more than one component file.
2. When the hard disk drive is installed, you *must* use the Shutdown Menu before turning OFF the printer.
3. If your software application has a collate print option, you *must* turn it OFF before you print overlays.
4. You *cannot* use overlays with the:

- Windows 2000 PostScript driver
- Macintosh driver

5. The message DISK FULL appears if there isn't enough memory for the data.

Hardware / Software Requirements

- the Storage Device Manager software must be installed.
- printer internal hard disk drive (Installation is highly recommended)

Required Actions

Before overlays can be printed, they must be

- created in a software application
- saved as a print file
- downloaded to storage

Overlays

Requirements for Using

Storage Requirements

Locations

Use Storage Device Manager to store the overlays to the printer's:

- hard disk drive

  or

- flash memory

Maximum Available Space

Hard Disk Drive

2 MB each for PCL Macros and PostScript Forms

Flash Memory

about 0.5 MB each for PCL Macros and PostScript Forms

Overlays

Windows 2000 and XP: PCL

Defining

In Windows 2000, overlays can only be printed using the PCL driver.

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon, then click **Printing Preferences**.
   The OkiPrinting Preferences dialog box appears.
3. Click the **Overlay** tab.
4. Click **Define Overlays**.
5. Under **Overlay Name**, enter a name for the overlay.
6. Under *ID Value,* enter the ID number for the file saved using the Storage Device Manager software (see the File List printout).
7. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages.**
8. Click **Add**, then click **Close**.
   The overlay you defined appears in the Defined overlays list.
9. Click **OK** and close the Printers dialog box.

Overlays

Windows 2000: PCL

Printing

1. Open the document in the software application.
2. Click **File** → **Print**.
   The Print dialog box appears.
3. Click the **Overlay** tab.
4. Under **Defined Overlays**, click any overlays you wish to use.
   To select more than one, press the Ctrl key while selecting the names.
5. Click **Add**.
   Each name appears in the **Active overlays** box.

To print a sample of an overlay for review

1. Under **Defined Overlays**, click the name.
2. Click **Test Print**.

To add more overlays to the list

1. Click **Define overlays**.
2. In the **Define overlays** dialog box, fill in the appropriate information.
3. Click **Close**.
4. Click **Print using active overlays**.
5. Click **Print**.

Overlays

Windows 2000: PCL

Editing

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon, then click **Printing Preferences**.
   The Oki Printing Preferences dialog box appears.
3. Click the **Overlay** tab.
4. Click **Define overlays**.
   The Define overlays dialog box appears.
5. Under **Defined overlays**, click the overlay to be edited.
6. Make your changes, then click **Apply**.
7. Click **Close**.
8. Click **OK** and close the Printers dialog box.

Overlays

Windows 2000: PCL

Deleting

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon, then click **Printing Preferences**.
   The Oki Printing Preferences dialog box appears.
3. Click the **Overlay** tab.
4. Click **Define Overlays**.
   The Define Overlays dialog box appears.
5. Under **Defined overlays**, click the overlay to be deleted.
6. Click **Remove**, then click **Close**.

Overlays

Windows Me/98/95: PCL

Defining

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon, then click **Properties**.
   The Oki Properties dialog box appears.
3. Click the **Job Options** tab, click the **Overlay** button.
4. Click **Define overlays**.
5. Under **Overlay Name**, enter a name for the overlay.
6. Under **ID Value**, enter the ID number for the file saved using Storage Device Manager (see the File List printout).
7. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
8. Click **Add**, then click **Close**.
   Each overlay you defined appears in the Defined overlay list.
9. Click **OK** and close the Printers dialog box.

Overlays

Windows Me/98/95: PCL

Printing

1. Open the document in the software application.
2. Click **File** → **Print**.
   The Print dialog box appears.
3. Make sure the Oki PCL driver is selected, then click **Properties** (or your application's equivalent).
   The Oki Properties dialog box appears.
4. Click the **Overlay** tab.
5. Under **Defined Overlays**, click any overlays you wish to use. To select more than one, press the Ctrl key while selecting the names. Click **Add**.
   The names appear in the Active overlays box.
   - To print a sample of an overlay to see what it looks like, click its name in the **Defined overlays** box, then click **Test Print**.
   - If you wish to add more overlays to the list, click **Define overlays**. In the **Define overlays** dialog box, fill in the appropriate information. Click **Close**.
6. Click **Print using active overlays.** Click **OK** and print the document.

Overlays

Windows Me/98/95: PCL

Editing Defined

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon.
3. Click **Properties**.
   The Oki Properties dialog box appears.
4. Click the **Job Options** tab.
5. Click the **Overlay** button.
6. Click **Define overlays**.
   The Define overlays dialog box appears.
7. Under **Defined overlays**, click the overlay to be edited.
8. Make any changes
9. Click **Apply**.
10. Click **Close**.
11. Click **OK** and close the Printers dialog box.

Overlays

Windows Me/98/95: PCL

Deleting

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PCL printer icon, then click **Properties**.
   The Oki Properties dialog box appears.
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define overlays**.
   The Define overlays dialog box appears.
5. Under **Defined overlays**, click the overlay to be deleted.
6. Click **Remove**, then **Close**.
7. Click **OK** and close the Printers dialog box.

Overlays

Windows Me/98/95: PostScript

Defining

1. Click **Start** → **Settings** → **Printers**.
2. Right click the Oki PostScript printer icon. Click **Properties**.
   The Oki Properties dialog box appears.
3. Click the ***Job Options*** tab. Click the ***Overlay*** button.
4. Set up an Overlay Group: Click **New**.
   The Define Overlays dialog box appears.
5. Under **Group Name**, enter a name for the group of overlays you are creating.
6. To select the pages that the overlay prints on,
   - In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed,

     or

   - Select **Custom** and enter specific page numbers under **Custom pages**.
7. Under **Overlay Name**, type in the name of the overlay file exactly as it was stored using Storage Device Manager (see the File List printout), *including the file extension HST.*
   Overlay file names are case sensitive.
8. Click ***Add***.
9. Repeat steps 7 and 8 to add additional overlays (maximum of three per group).
10. Click ***OK***.

To create additional overlay groups (up to 32 can be defined), repeat steps 4 to 10 above.

Finish

11. Click ***OK*** and close the Printers dialog box.

Overlays

Windows NT: PostScript

PostScript

1. Click **Start** → **Settings** → **Printers.**
2. RIght click the printer name. Click **Document Defaults**.
3. On the **Job Options** tab, click the **Overlay** button.
4. Click the **New** button.
5. In the **Overlay Nam**e list, enter the file name of the overlay. Select the pages where you want the overlay to print.

NOTE

The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printers' hard disk drive. It is case sensitive.

6. Under **Form setting**, in the drop-down list, enter or select a form name. Click **Add.**

NOTE

The Form Name is a random name of your selection.

7. Click **OK**.
8. To continue to add files to the overlay (if required), repeat steps 5 through 8.
9. Under **Defined Overlay**, highlight the overlay name(s). Click **Add** to add the overlay(s) to the list under Active Overlay. To select more than one overlay, hold the CTRL key while clicking on each name.
10. At the top of the dialog box, use the drop-down list to select **Use Overlay**. Click **OK**.
11. Click OK to close the Default dialog box.

Overlays

Windows NT: PCL

Defining

1. Click **Start** → **Settings** → **Printers.**
2. Highlight the printer name. Click **Document Defaults**.
3. Click the **Job Options** tab.
4. Click the **Overlay...** button.
5. To define an overlay, click the **Define Overlays** button.
6. In the **Overlay Name** list, enter the file name of the overlay

NOTE

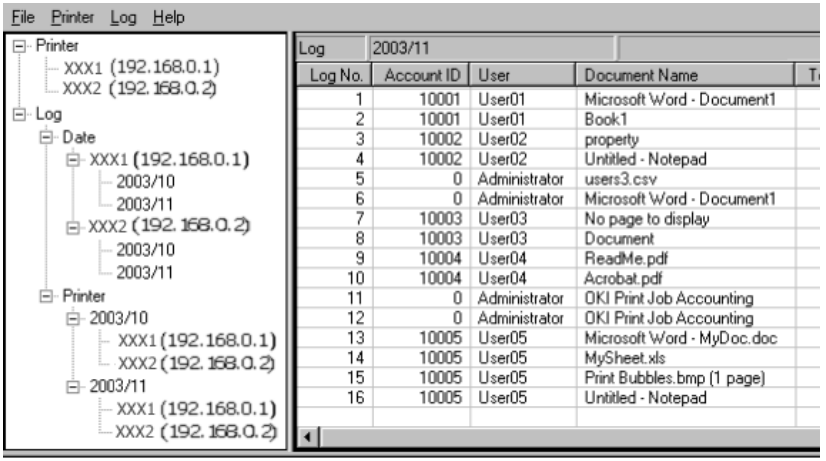
The Overlay Name must be *EXACTLY* the same as the file name you noted in the previous section. This is the name under which the file is stored on the printer's hard disk drive. It is *case sensitive*.

7. In **ID Values, e**nter the ID of the file. Please refer to the instructions for the Storage Device Manager utility.
8. Select which pages the overlay is to be printed on from **Print on Pages** or use **Custom Pages** to select specific page numbers in the document. Click **Add**.
9. Click **Close**.
10. Repeat steps 5 though 9 for each overlay you wish to add.
11. Under **Defined Overlay**, highlight the overlay name. Click the **Add** button to add the overlay to the list in **Active Overlays**.
12. Select **Print Using Active Overlays**.
13. Click **OK**.
14. Click **OK** to close the Default dialog box.

Print Job Accounting Utility

Introduction

The Print Job Accounting software, designed specifically for OKI printers in a network environment, provides job accounting features that allow you to track printer usage, calculate printing costs, and specify access available to each client (user).



NOTE

The screen shots in this User's Guide are generic. When you see XXX1, XXX2, etc., in a screen, they represent a specific model number which will vary depending on which models are being used in your system.

With Print Job Accounting, you can

- Control costs by limiting access to color printing for specific clients.
- Plan equipment allocation by monitoring exactly how much each client prints.
- Set up billing for individual clients based on their recorded usage.

NOTE

This software saves acquired log data on the printer's Hard Disk Drive (optional on some models). If the printer does not have the Hard Disk Drive, the acquired logs are saved to the Flash memory.

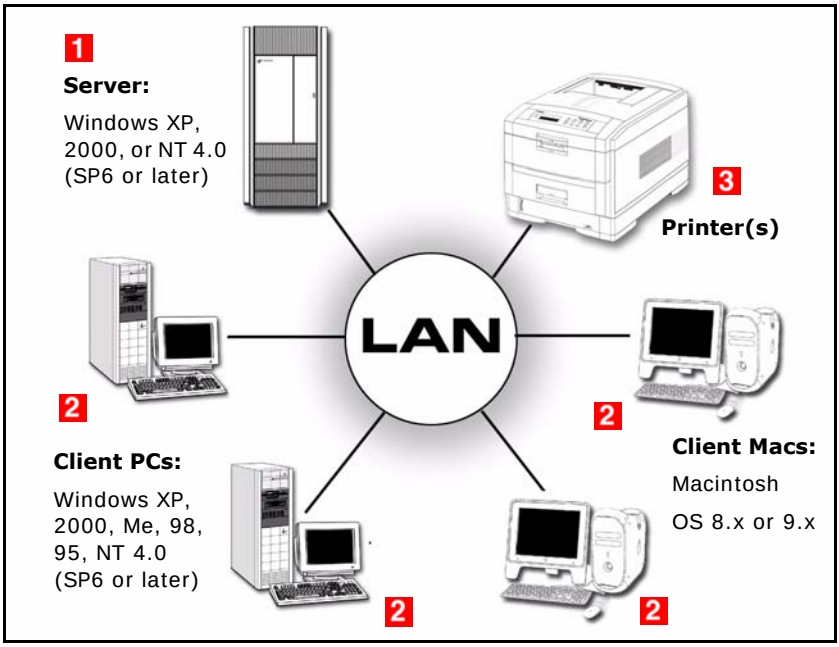
The Flash memory is relatively limited as to how much information can be stored on it.

The Hard Disk Drive has much greater memory capacity.

Therefore, we highly recommend that your printer be equipped with a Hard Disk Drive for use with the Print Job Accounting software.

Overview

Sample Network Diagram



Requirements

The Print Job Accounting utility requires

1. **Server computer** using an appropriate Windows operating system.
2. **Client computers** using Windows and/or Macintosh operating systems.
3. **Connection to the printer(s)** to be managed; either a direct connection (USB or Parallel) to the server, or a network TCP/IP connection.

NOTE

Print Job Accounting does not operate in NetBEUI or NetWare environments.

Operating System Requirements

Server (Windows Only)

The Print Job Accounting server software can be run under any of the following Windows operating systems, with the latest Service Pack installed.

- Windows XP
- Windows 2000
- Windows NT 4.0 (Service Pack 6 or later)

Client Computers (Windows or Macintosh)

The Print Job Accounting Client software can run under any of the following operating systems:

Windows

- XP
- 2000
- Me
- 98
- 95
- NT4.0 (Service Pack 6 or later)

Macintosh

- OS 8.1, 8.5.x, 8.6.x (Adobe PS 8.6 or greater required)
- OS 9.0, 9.0.4, 9.1.x, 9.2.x (LaserWriter 8.7 required)

Installation

Installing the Print Job Accounting Server Software

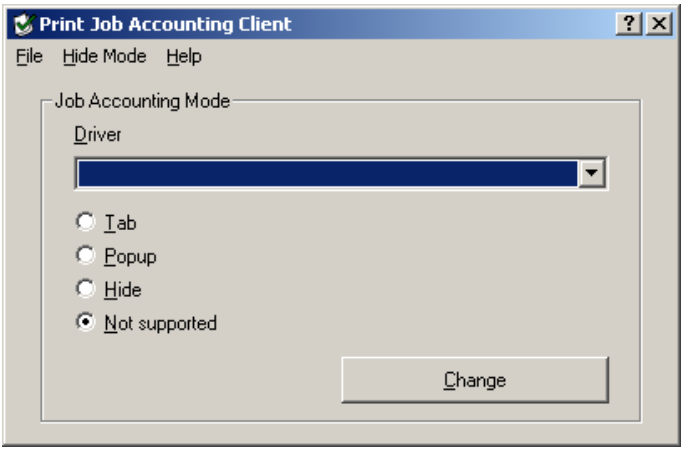
1. Place the driver CD supplied with your printer in the CD-ROM drive on the Server computer and wait for the Menu Installer to open.
   If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM drive and double-click Install.exe, then click OK.
2. Click **Next** to accept the terms in the license agreement.
3. Select the language.
4. Click **Network Software** → **Administration Tools** → **Job Accounting** → **Server** and follow the on-screen instructions.
5. If you want to create log reports using Excel, install the report tools. Click **Report Tools** and follow the on-screen instructions.

NOTE

The printer driver(s) must also be installed on the Client computers.

Windows Client Computers

1. Place the driver CD supplied with your printer in the CD-ROM drive and wait for the Menu Installer to open.
   If the CD does not AutoPlay, click Start Æ Run Æ Browse. Browse to your CD-ROM drive and double-click Install.exe, then click OK.
2. Click **Next** to accept the terms in the license agreement.
3. Select the language.
4. Click **Network Software** → **Administration Tools** → **Job Accounting** → **Client** and follow the on-screen instructions.
5. When the installation finishes, the following window appears. See “Client Software” on page 697 for more information.



Macintosh Client Computers

Normally, the Oki Job Accounting software is automatically installed when you install the printer driver. To activate the Job Accounting Client software:

1. Select **Print Desktop...** on the File menu.

2. Ensure that your printer model is selected, then click **General** and select **Plug-in Preferences**.
3. Open the Print Time Filters menu, then check **Print Time Filters**, **JobType** and **JobAccounting**.
4. Click **Save Settings**, then click **OK**.
5. Click **Cancel**.

Server Software Capabilities

Use the Print Job Accounting server software

- to register printers and clients
- to set print limits
- to set up automatic generation of print logs.
- to set up automatic email of log reports to the Administrator

For Each Client, You Can

- Enable/disable print or color print.
- Set upper limits for items such as printed pages.
- Log selected items, including:
  - Date
  - User Name
  - Printer Name
  - Document Name

NOTE

The information on document names cannot be acquired while printing from some Windows applications or from a Macintosh.

  - Number of Printed Pages broken down by color versus monochrome
  - Paper Size
  - Simplex or Duplex Printing
  - etc.
- Set up an account, allowing printing only within the limits set.

For Each Printer, You Can

- Set fees by sheets, paper sizes, and so forth.
- Set (all) print enabled/disabled or color print enabled/disabled.
- Set upper limits for items such as printed pages.
- Set up an account, allowing printing only within the limits set.
- Set up Group(s) in which to include the printer

For Print Logs, You Can

- Export print logs as comma-separated value (.csv) files, which can be imported into many commercially available spreadsheet programs.
- Automatically email print logs to the Administrator monthly on a selected day.
- Customize items to be included in the log, setting them either manually (see page 684) or using one of the multiple Microsoft® Excel spread sheet macros provided (see page 688).
- Acquire a print log for print jobs sent from a client directly to a printer, bypassing the print server.
- Accurately record printed pages through print logs even when a client has cancelled his/her print jobs or paper jams have occurred.

User Name Versus Account ID

User Name

The User Name is displayed whenever print logs are displayed, and its sole purpose is to make it easy to see who has been printing.

The User Name is assigned when creating an Account ID (see page 669). It may be set up to represent an individual client or a group of clients, and is associated with the Account ID number.

The User Name does not necessarily need to be the same as the Windows Login User Name.

Account ID

The Account ID is the number Print Job Accounting actually uses to identify clients. Account ID values of 1 through 1879048191 can be assigned. Clients who do not have their own Account ID will be recognized as Unregistered ID(0).

Normally an Account ID is assigned to each individual client. If the same Account ID is assigned to different clients, all the print jobs they have made will be added up as the same client when the System totals up.

Account IDs must be set for each individual registered printer connected to the Server. The same Account ID can be set up for more than one printer, with different limits set for each printer. Therefore, you can set particular clients to have access only to certain printers.

Examples of Account ID Scenarios:

To Permit Only Some Clients to Print:

In this case, you need not necessarily assign an Account ID to each and every client. You assign one only to those clients who are permitted to print. All other clients will be recognized as Unregistered ID(0) and all you have to do is to inhibit printing by Unregistered ID clients.

To Permit Only Some Clients to Print in Color:

You can prevent any Unregistered ID clients from printing in color, in the same way as above.

To Set the Print Limits and Collect Print Logs by Department:

In this case, you need not necessarily assign an Account ID to each and every client. All you have to do is to assign an Account ID to each department and specify the Group Name in place of User Name.

To Set Print Limits and Collect Print Logs for Each Client:

Here, you need to assign an Account ID to each individual client. Be sure that you do not to assign the same Account ID to more than one. client.

NOTE

All Account IDs must be set in the Server computer for each of the Client computers that will be allowed to print to a specific printer.

Server Software

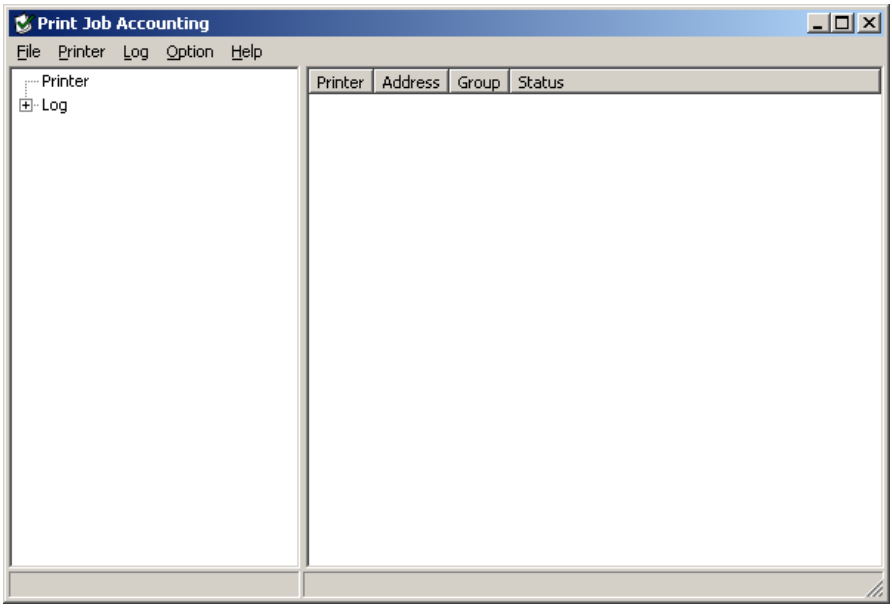
Starting the Server Software

Click **Start** → **Programs** → **Okidata** → **Print Job Accounting** →**Print Job Accounting**.

Important!

The first time you open the Server software, the following window appears. Make a note of the Server ID for future use. You can also find it by clicking Help → Server ID … from the main Job Accounting Window.

The following window appears:



Server Software Pull-Down Menus

There are five Server Software Pull-Down Menus

- File Menu
- Printer Menu
- Log Menu
- Option Menu
- Help Menu

File Menu

Exit	Close the application.

Printer Menu

Add a Printer	Register a new printer.
Manages multiple printers as a group ...	Set up multiple registered printers as a group.
Delete a Printer/ Printer Group[a]	Delete a registered printer or group of printers.
Change a Printer Group	Add or delete registered printers from a group.
Start/End Log[a]	Start/end the process of acquiring information for logs from the printer at the set interval time.
Acquire a Log[a]	Acquire a print log saved in the printer.[b]
Setting the Time[a]	Set the present time in the printer.[c]
Define Fees ...	Set up and select fees.
Properties ...	Set the printer properties.

a. Before running, select the subject printer from the “Printer Tree” on the left side of the window.
b. Select **Log Menu** → **Refresh Display** to update the information on the log pane after having run this menu.
c. If the printer has been switched on and off, the correct time will not set in the printer until the next time printer logs are acquired. You need only do this if the printer has been switched on and off in between acquisition of logs.

Log Menu

Display Logs[a]	Change the display from Total to Logs.
Display Total[a]	Change the display to • Total per Printer • Account ID or • Month
Export Report Logs[a]	Export the required fields for the report macro in a .csv file.
Export Logs[a]	Export the log as a .csv file.
Export Total[a]	Export totals as a .csv file, by • Printer • Account ID, or • Month
Delete the log[a]	Delete the selected log
Display Details	Switches back and forth between displaying only the default items in the log and displaying the entire detailed list of items in the log.[b]
Display/Export Item Settings	Select the items to be shown or exported as part of Log or Total display (see page 684 for more information).[b]
Refresh Display	Refresh the display.

a. Before running, select the subject item from the “Log Tree” on the left side of the window. If you select “Log,” all items will be subject to displaying/exporting. If you select one printer, only that printer will be subject to displaying.

b. Select **Log Menu** → **Refresh Display** to update the information on the log pane after having run this menu.

Option Menu

Setup ...	Set up: • mail server • email address for Sender • email address for Administrator • where you wish to store logs • closing date for logs (select the day of the month which determines when logs are considered previous month logs as opposed to current month logs).

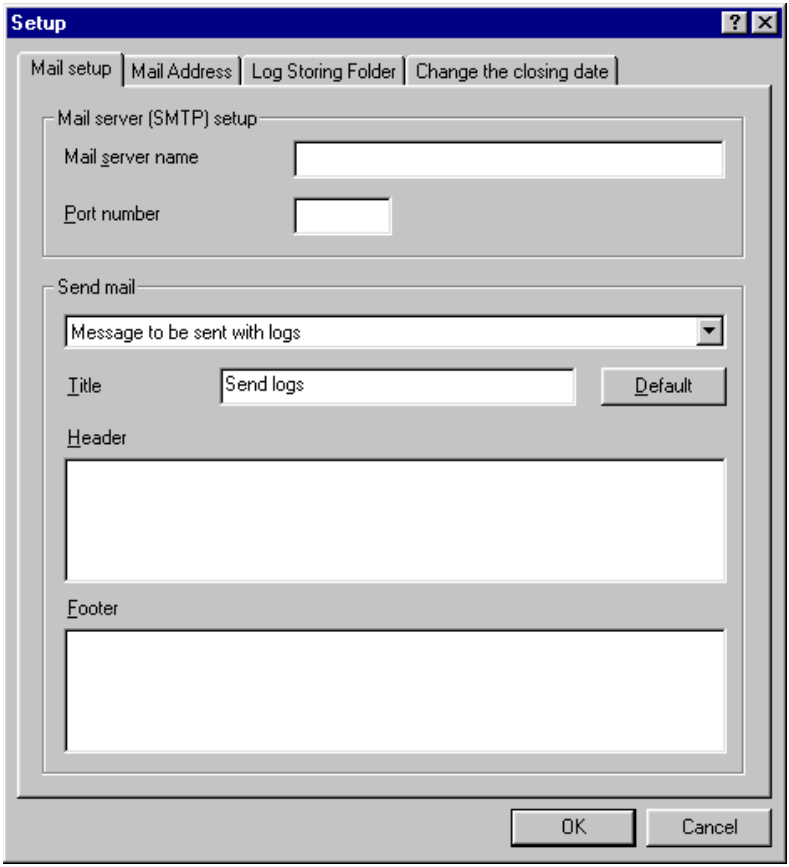
Help Menu

Server ID ...	Display Server ID.
Help ...	Display the Help Topics window with tabs • Contents • Index • Find
Version Info ...	Display version information.

Setting Up Automatic Email

To set up monthly automatic email of selected print log data to the administrator, open the Job Accounting software, then:

1. Click **Option** → **Setup**.
   The following window appears:

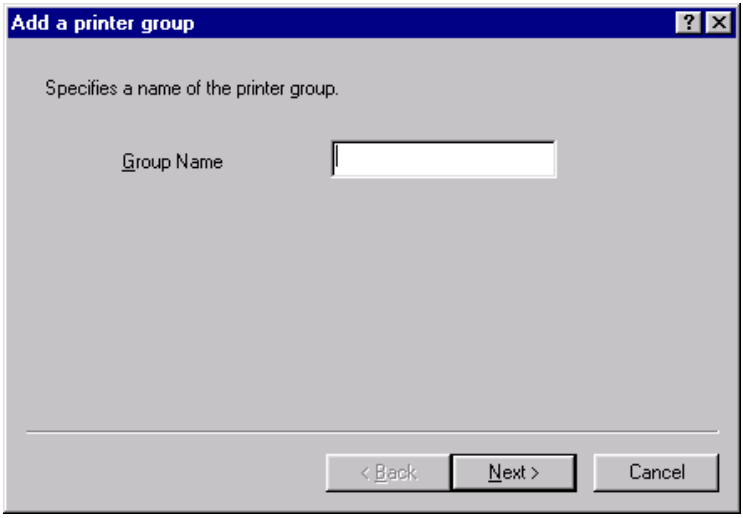


2. Set up the general information on the **Mail Setup** tab, including the mail server, when an email is to be sent, and the header and footer text to be included with the email.
3. On the **Mail Address** tab, enter a name and email address for the sender, and the name and email address for the administrator to receive the emails.
4. On the **Log Storing Folder** tab, enter the path where the automatically exported logs are to be stored.
5. On the **Change the closing date** tab, enter the day of the month on which logs are to be closed. Log reports will automatically be emailed to the administrator on the day after this.
6. Click **OK**.

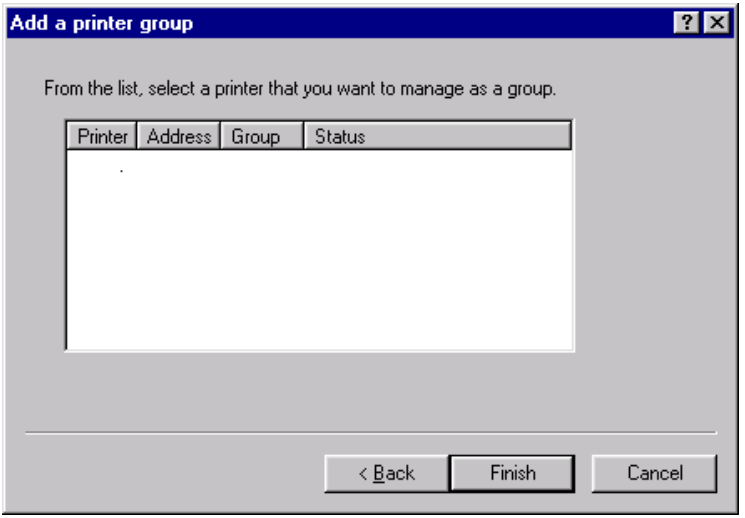
Defining Printer Groups

If you wish to create groups of printers:

1. From the main Job Accounting window, click **Printer → Manages multiple printers as a group ...**
   The following window appears:



2. Enter the Group Name of your choice, then click **Next**.
The following window appears:



NOTE

At this point, no printers have been registered, so none appear in the box. Printers can be added to established Groups as they are being registered.

If you create a new group after registering printers, a list of the registered printers will appear in the box and can be highlighted for inclusion in the group.

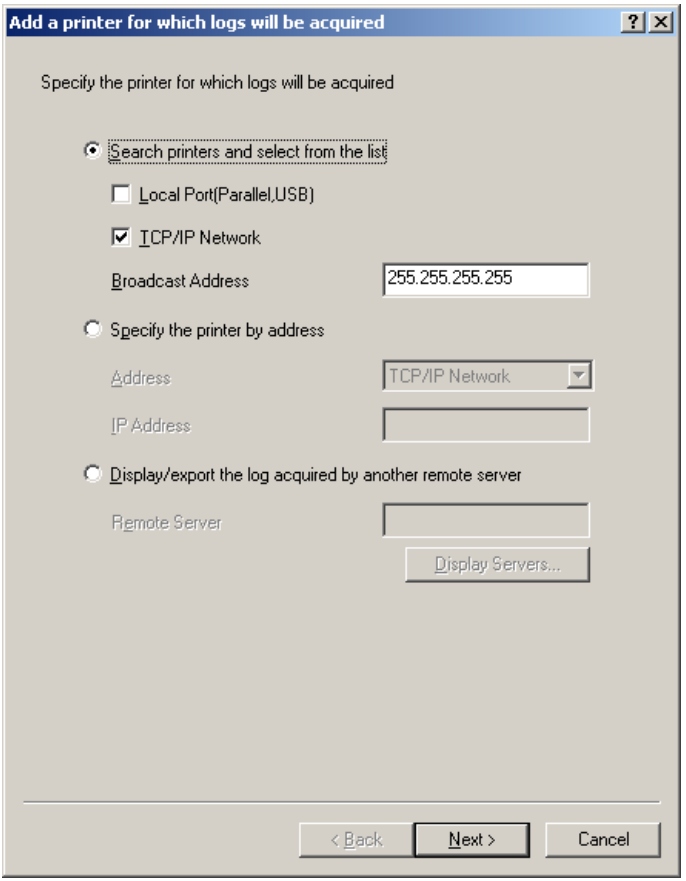
3. Click **Finish**.

Registering Printers

To use Print Job Accounting, you need to register printers to be managed in the Server Software.

Before starting, check that the printers are powered up and properly connected.

1. From the main Print Job Accounting window, click **Printer** → **Add a printer**.
   The following window appears:



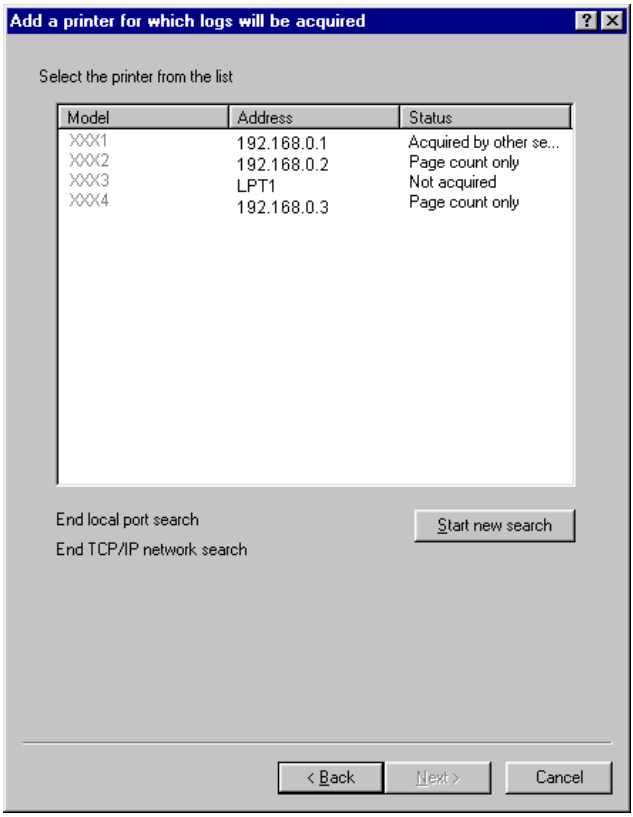
2. Select the appropriate box(es).

NOTE

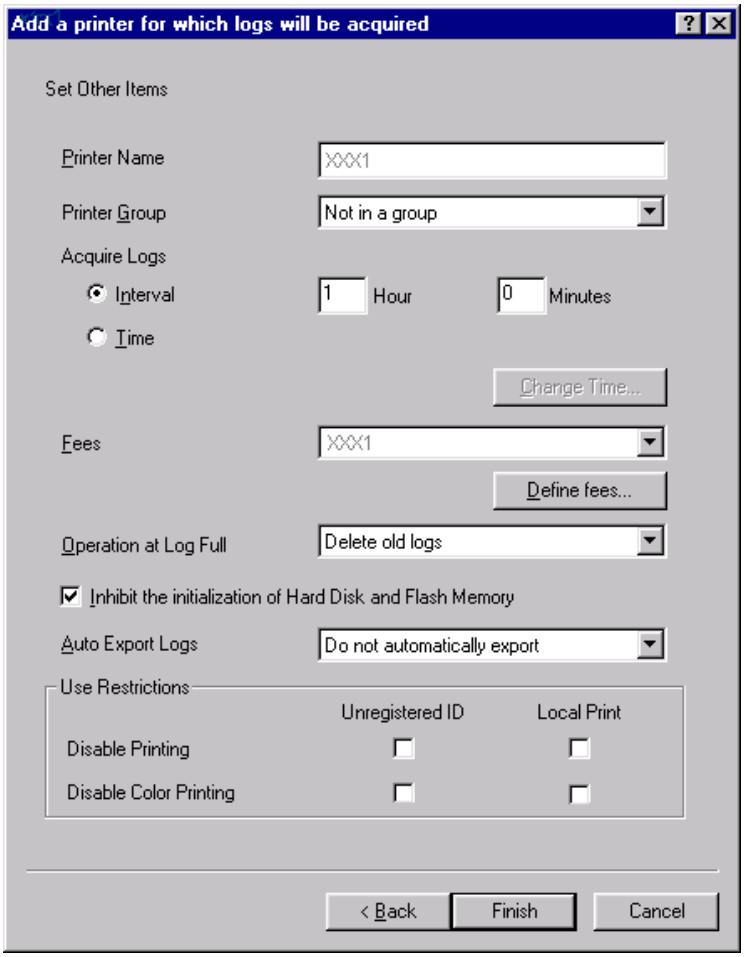
Only printers supported by this System will be found. If the search is unsuccessful, check that the printers are turned on, online and properly connected.

– To have the software search out local and/or network printers, select **Search printers** and select **Local Port** and/or **TCP/IP Network**.
– To specify the printer address (local or network) manually, select **Specify the printer by address** and fill in the appropriate information.

3. Click **Next** and wait while the software searches for printers.
A window appears, showing a listing of all the printers found. For example:



4. Select the printer you want to register from the list of printers searched and click **Next**.
The following window appears:



5. Set up the printer:

Printer Name
Type in a printer name containing up to 32 characters.

Printer Group
If the printer is to be included in a group, select the group here.

> **NOTE**
> **Groups must first be defined using Printer → Manages multiple printers as a group ... in the main Job Accounting window. See page 646.**

Acquire Logs
You can designate the time to acquire logs in one of two ways:

- by an interval of up to 24 hours

  If this value exceeds 24 hours, it is set to 24 hours.

or

- by up to five preset times per day

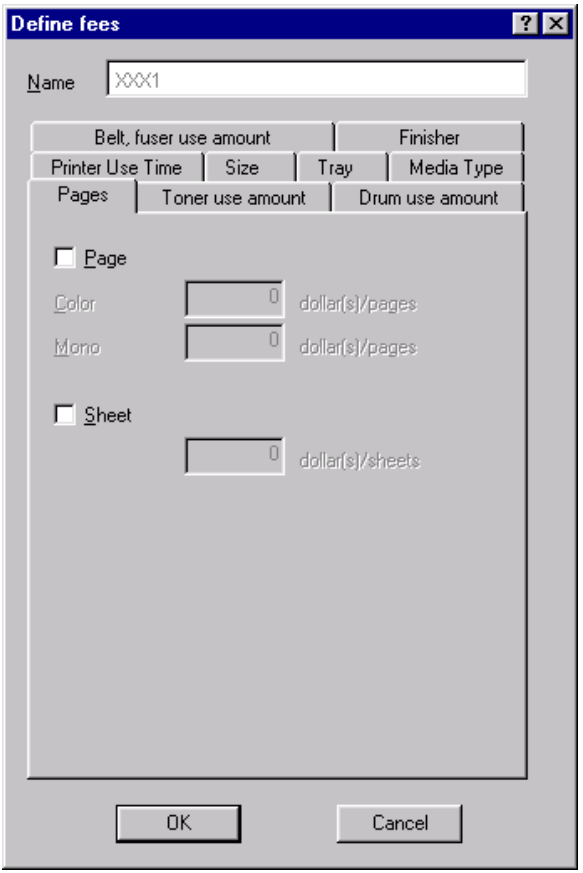
  Select Interval, then click **Change Time ...** to set times.

Fees

In the drop-down box, select a fee definition to be used. Some fee settings are available with defaults.

To custom define settings for the printer, click **Define fees ...** and then click **Add** in the Defined Fees window.

The following window appears:

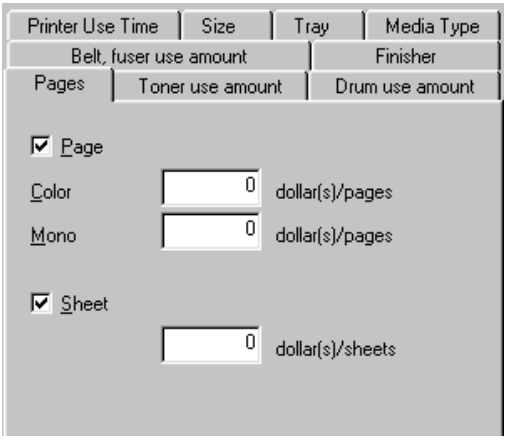


Fees
Define Fees window

Pages Tab

– ☑ **Page**: Select to set a fee to be charged for each page printed in color and for each page printed in mono.

– ☑ **Sheet**: Select to set a fee to be charged for each printed sheet. In this case, the same fee will be charged for two-sided printing as for one-sided printing.

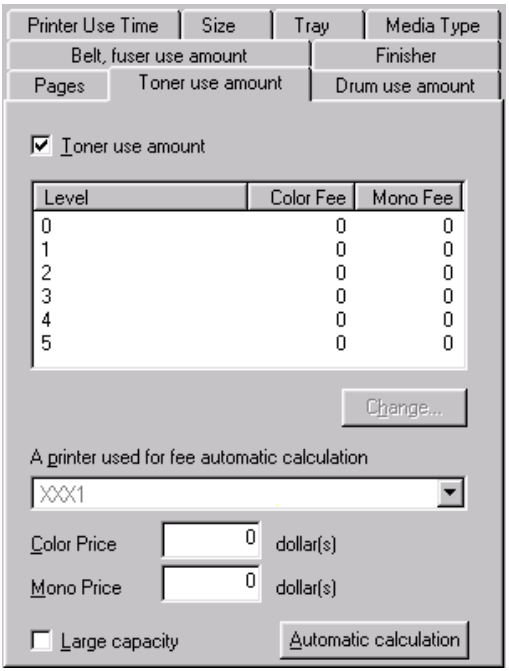


Fees
Define Fees window

Toner use amount Tab

– ☑ **Toner use amount**: Select to set a standard feel per page for color and for mono printing.

– **Automatic calculation**: Use this to set up automatic calculation of fees for toner use and save it under the name you enter. Once the settings are saved, they can be used for other printers as well by selecting the saved settings name in the **Fees** drop-down box in either the “Add a printer for which logs will be acquired” window (**Printer** → **Add a Printer** → [click a printer] → **Next**) or the Option tab of the “Properties of printer from which logs are acquired” window ([click a printer in the Printer Tree] → **Printer** → **Properties** → **Option**).

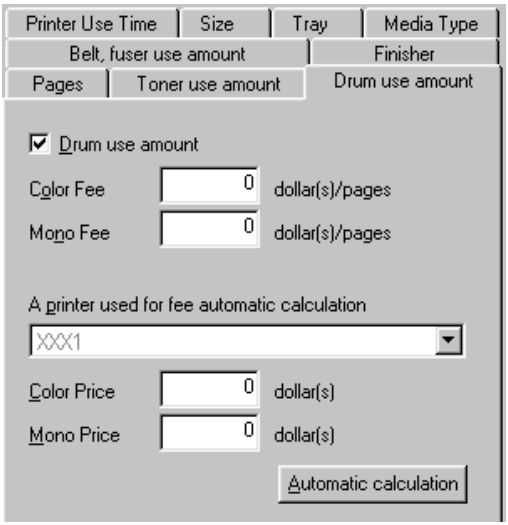


Fees
Define Fees window

Drum use amount Tab

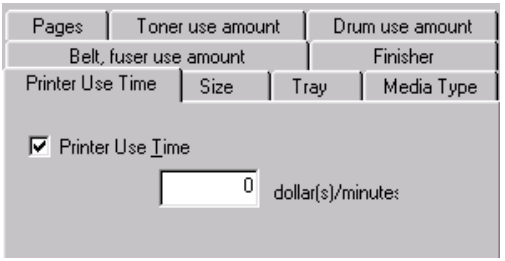
– ☑ **Drum use amount**: Select to set a standard fee per page for color and for mono printing.

– **Automatic calculation**: Use this to set up automatic calculation of fees for drum use and save it under the name you enter. Once the settings are saved, they can be used for other printers as well by selecting the saved settings name in the **Fees** drop-down box in either the “Add a printer for which logs will be acquired” window (**Printer** → **Add a Printer** → [click a printer] → **Next**) or the Option tab of the “Properties of printer from which logs are acquired” window ([click a printer in the Printer Tree] → **Printer** → **Properties** → **Option**).



Fees
Define Fees window

Printer Use Time Tab

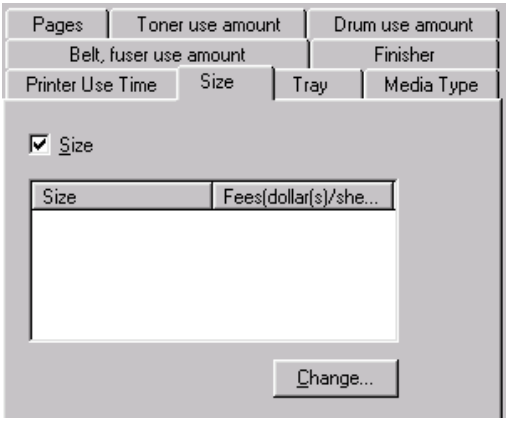


– ☑ **Printer Use Time**: Select to set a fee for each minute of print time used.

Fees
Define Fees window

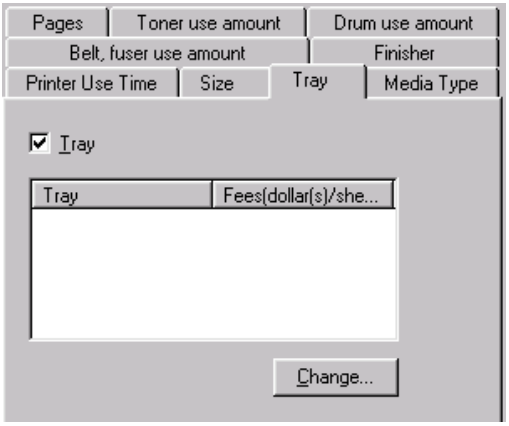
Size Tab

– ☑ **Size**: Select to set a fee per sheet printed which varies depending on the size of media used. Click **Change** to set fees for individual media sizes.



Fees
Define Fees window

Tray Tab

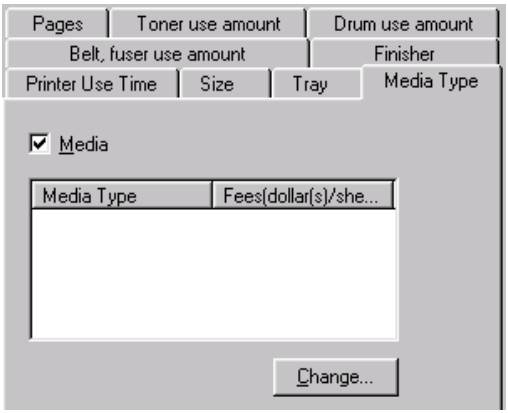


– ☑ **Tray**: Select to set a fee per sheet printed which varies depending on the tray used. Click **Change** to set fees for individual trays.

Fees
Define Fees window

Media Type Tab

– ☑ **Media**: Select to set a fee per sheet printed which varies depending on the media used. Click **Change** to set fees for the different media, including transparencies, labels, letterhead, card stock, etc.

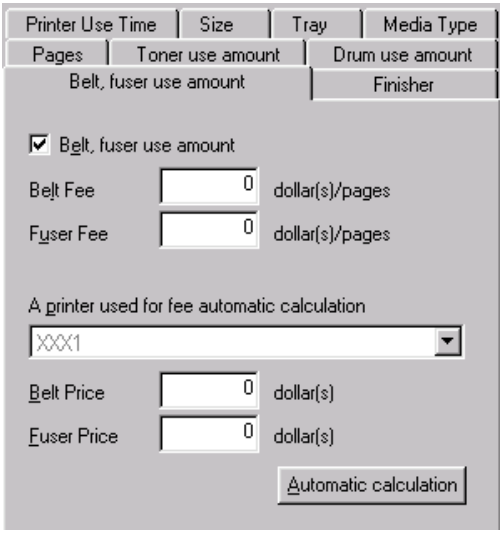


Fees
Define Fees window

Belt fuser use amount Tab

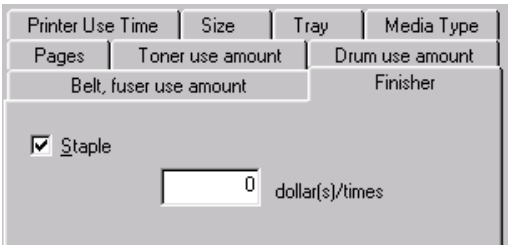
– ☑ Belt, fuser use amount: Select to set a fee per page for belt and/or fuser usage.

– Automatic calculation: Use this to set up automatic calculation of fees for belt and fuser use and save it under the name you enter. Once the settings are saved, they can be used for other printers as well by selecting the saved settings name in the **Fees** drop-down box in either the "Add a printer for which logs will be acquired" window (**Printer** → **Add a Printer** → [click a printer] → **Next**) or the Option tab of the "Properties of printer from which logs are acquired" window ([click a printer in the Printer Tree] → **Printer** → **Properties** → **Option**).



Finisher Tab

– ☑ Staple: Select to set a fee for each use of the stapler. *Applies only when the optional finisher is installed on applicable models.*



Operation at log full

Here you can set what the printer does when the buffer for log storing becomes full and cannot store any more logs:

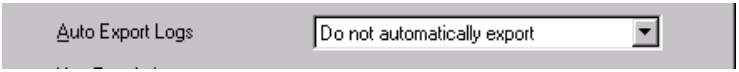
Cancel the job	Cancels the jobs once the buffer is full.
Do not acquire the log	Prints without acquiring logs once the buffer is full.
Delete old logs[a]	Deletes old logs and stores new logs.

a. The default setting.

Inhibit the initialization of HDD

This controls whether or not the Hard Disk Drive (if installed) and the Printer Flash (if installed) can be initialized. If initialization is inhibited, a client cannot delete the log using the printer's front panel. Use this in order to prevent the logs stored in the printer from being deleted.

Auto Export Logs

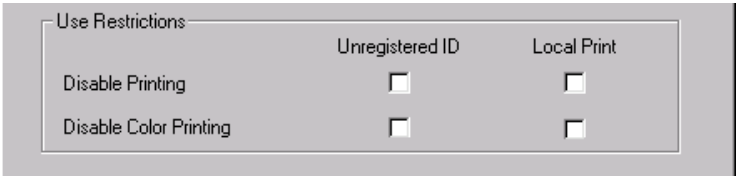


Sets whether or not, and how, log data will automatically be exported when it is acquired.

Do not automatically export[a]	Logs are not automatically exported.
Automatically export logs	Automatically exports logs in the format you select (see page 684).
Automatically export logs for report.	Automatically exports logs in a format which works with the Microsoft Excel macro reports (see page 688).
Mail logs to administrator[b]	Automatically exports logs in the format you select (see page 684), then sends an email to the Administrator with a copy of the log data attached, at the end of the day following the Closing date you specify.
Mail logs for report to administrator[b]	Automatically exports logs in a format which works with the Microsoft Excel macro reports (see page 688), then sends an email to the Administrator with a copy of the report attached at the end of the day following the Closing date you specify.

a. The default setting.
b. To use this, you must first set up the email and closing date information: (see page 644).

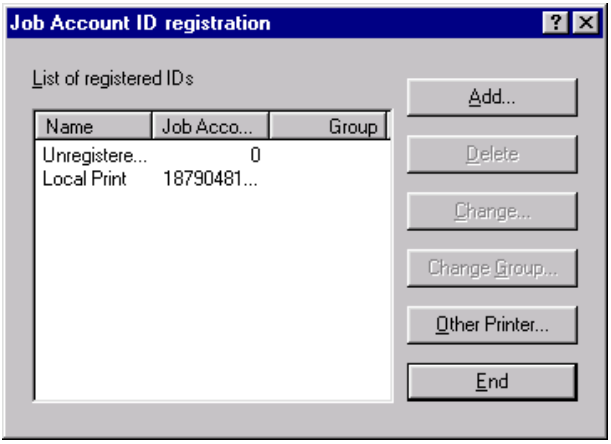
Use Restrictions



You can set usage limits for unregistered clients (data sent without ID) and for local print (print from operator panel such as menu map or file list). When "Disable Printing" is set, clients cannot change other settings.

- **Disable Printing**: All printing is cancelled.
- **Disable Color Printing**: Color data printing is cancelled.

6. Click **Finish**.
   The following window appears:



7. Use this window to add User Account IDs for the printer. For more information, see step 3, ff., under “Setting Up Account IDs” on page 669.
8. When done, click **End**, then **OK**.

Changing Settings for a Registered Printer

1. From the main Print Job Accounting window, highlight the printer you wish to change.
2. Click **Printer** → **Properties**.
   The following window appears:

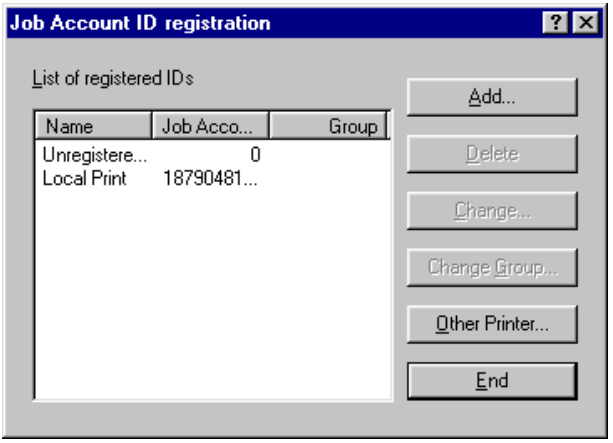
3. Make any desired changes in settings, on the various tabs:
   - **Printer** tab: change printer name, address, group
   - **User** tab: add new User IDs or change information for existing User IDs.
   - **Option** tab: modify log acquisition intervals/times, fees, Operation at Log Full, Inhibit initialization, Auto Export Logs, and Use Restrictions.
4. Click **OK**.

Adding Account IDs for a Registered Printer

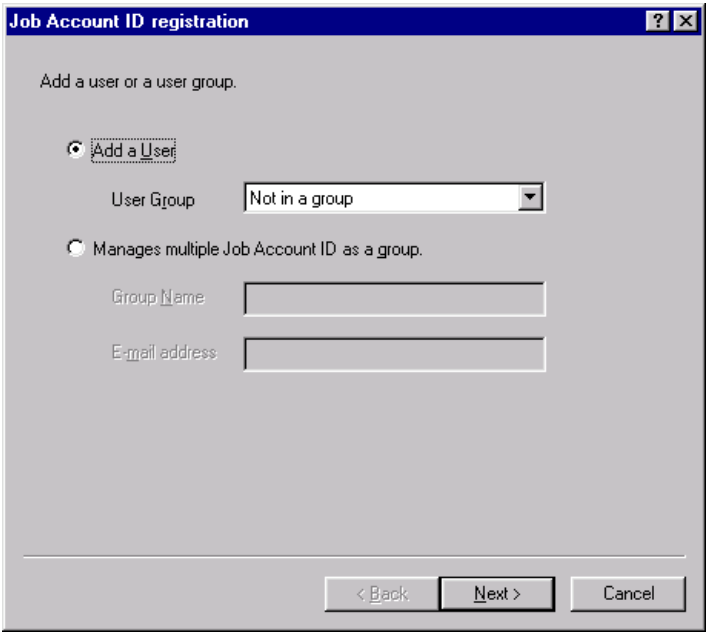
From the main Print Job Accounting window:

1. Double click the printer for which you wish to set up Account IDs.
   The following window appears:

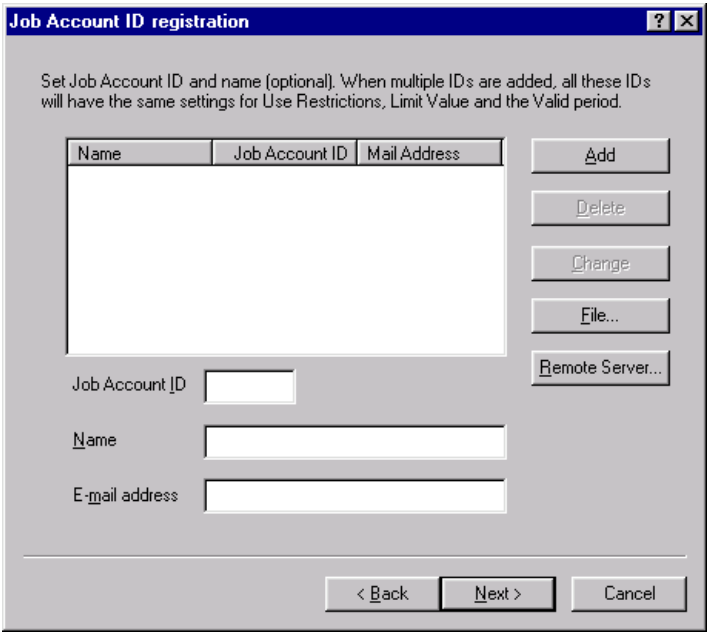
2. On the User tab, click **Register**.
The following window appears:



3. Click **Add**.
The following window appears:



4. Enter the appropriate selections, then click **Next**.
The following window appears:



5. Establish the new Account ID:

a. Enter the following information for the new Account ID:

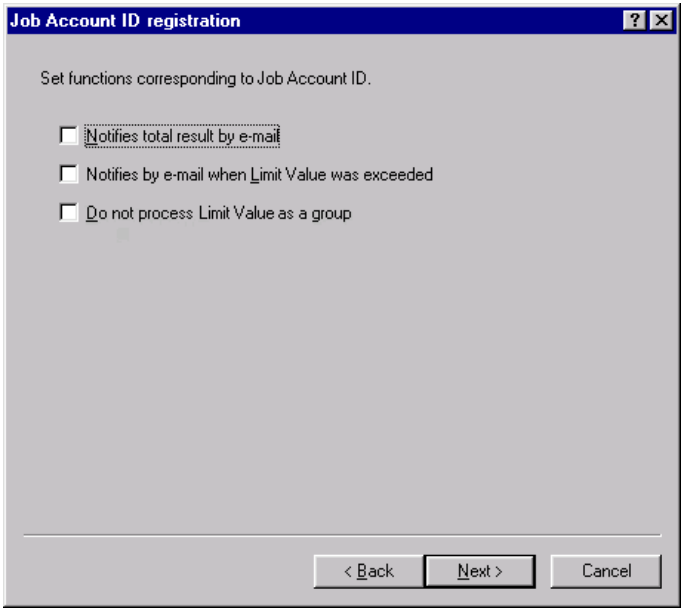
- Account ID number
- Name.
- Email address: if the user will have limits set on their printing, enter their email address so that they can be informed when their limit is exceeded and again when printing is once more available to them.

b. Click **Add**.

The new Name/ID appears in the box.

c. Click **Next**.

The following window appears:



Notifies total result by e-mail

Select to send this User an email summarizing their monthly usage of the printer.

Notifies by e-mail when Limit Value is exceeded

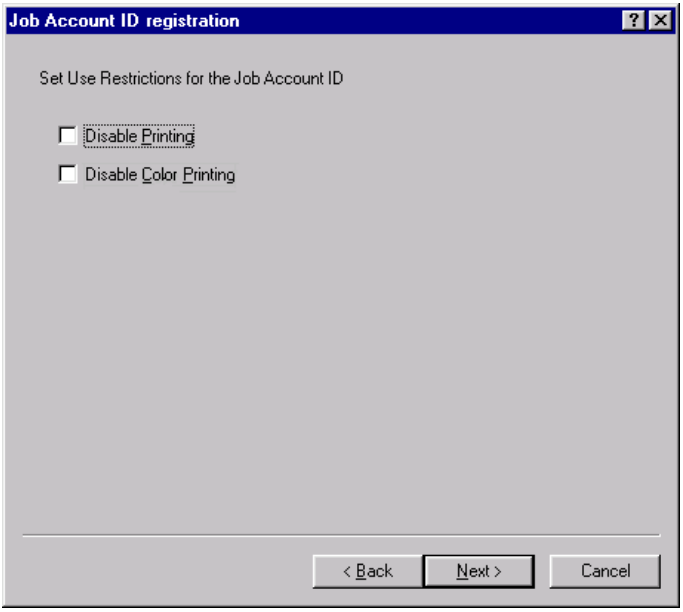
Select to alert this User by email when their set Limit Values have been exceeded, as well as when the limits have been reset and printing can be resumed.

Do not process Limit Value as a group

Restricts the set Limit Values to the particular user. Applies only when the printer/user belongs to a group.

d. Make your selections, then click **Next**.

The following window appears:



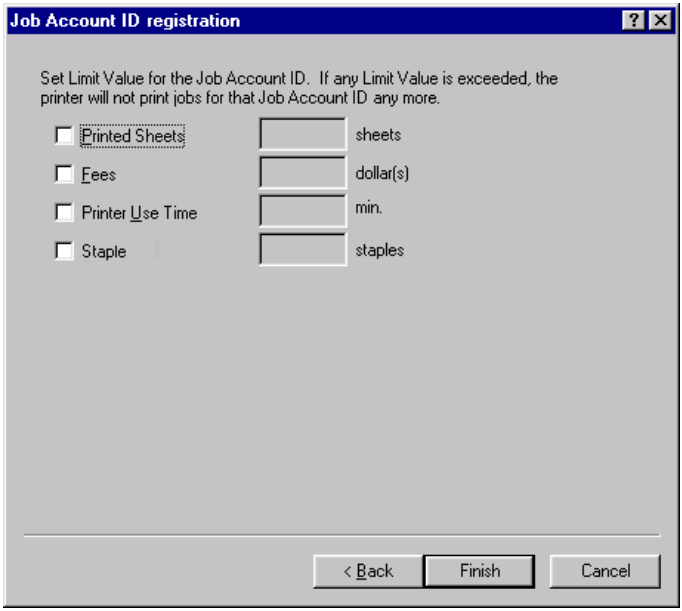
Disable Printing

All printing is cancelled. When this is selected, other settings cannot be changed.

Disable Color Printing

This Account ID cannot print color data. If they submit a color print job, it is automatically cancelled.

e. Select any print restrictions for the Account ID. Click **Next**.
The following window appears:



f. Set limits per 24-hour period for the Account ID by any or all of the following:

- Total pages
- Total dollars
- Total minutes
- Total staples used

These limits will be checked at the selected interval or at the time setting for the log.

NOTE

Whether the upper limits for a particular user have been exceeded is checked only at the set interval time. If the upper limits are exceeded between checks, printing continues even though the limit has been exceeded. At the next interval check, the User will be blocked from any further printing until the next 24-hour period starts. If you have so designated (see above), the User is informed by email that they have exceeded their limits for that 24-hour period.

g. Click **Finish**.

6. Repeat the previous step for each Account ID to be added.

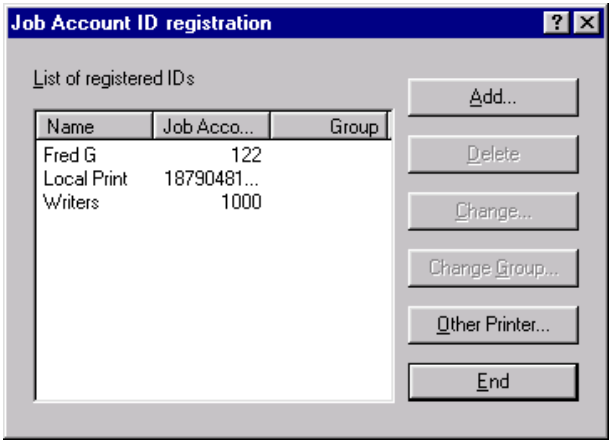
7. Click **End**. Click **OK**.

Importing Account IDs from a Registered Printer

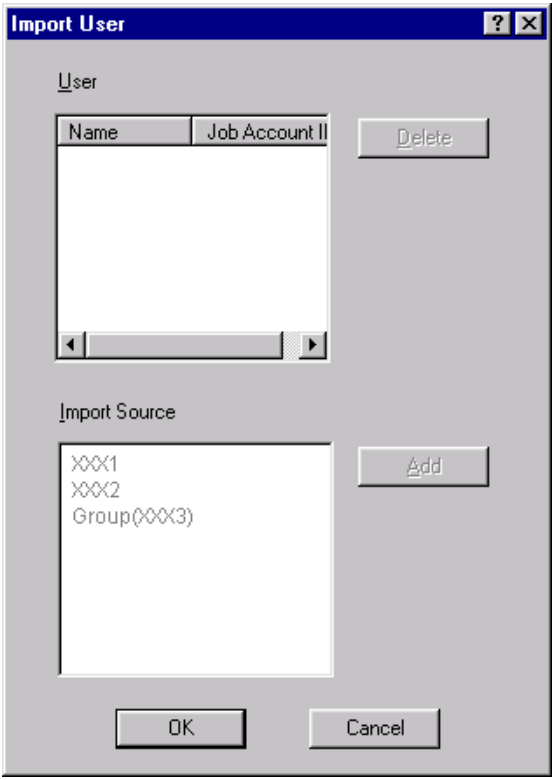
Once you create an account ID for a registered printer, you can import it into records for other registered printers/groups in the System. The Account ID will bring with it the same settings such as usage limits, but you can change the settings for the account on the newly assigned printer (see below) once the record is imported.

From the main Print Job Accounting window:

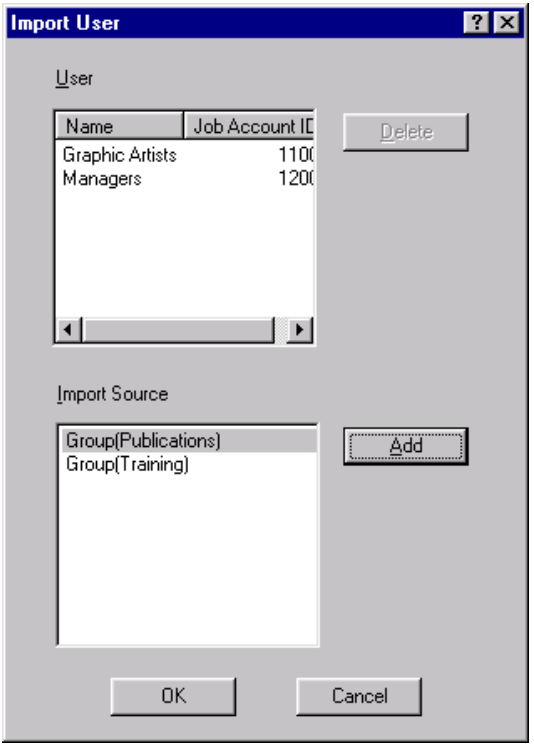
1. Double click the printer or group for which you wish to import Account IDs.
2. On the User tab, click **Register**.
   The following window appears:



3. Click **Other Printer**.
The following window appears:



4. From the Import Source list, select a printer or group from which you want to import Account ID(s) and click **Add**.
   Any IDs not already registered for the printer appear in the User box:

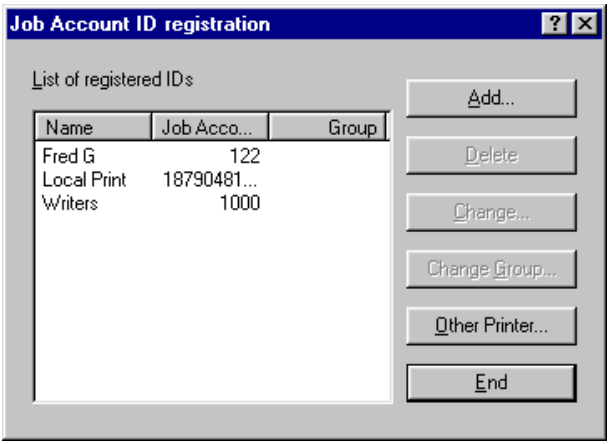


5. Click any Name/Account IDs that you do *not* wish to add and click **Delete**, then click **OK**.
   The selected Account ID(s) are imported into the List of registered IDs for the printer.

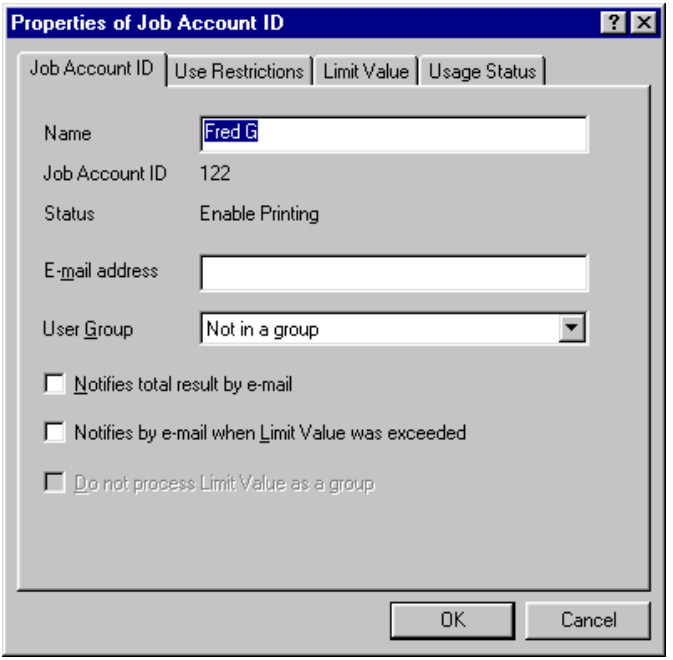
Changing Account ID Settings

From the main Print Job Accounting window:

1. Open the Printer Tree and double click the printer for which you wish to change Account IDs.
2. On the User tab, click **Register**.
   The following window appears:



3. Click the Name for which you wish to change settings, then click **Change**.
   The following window appears:

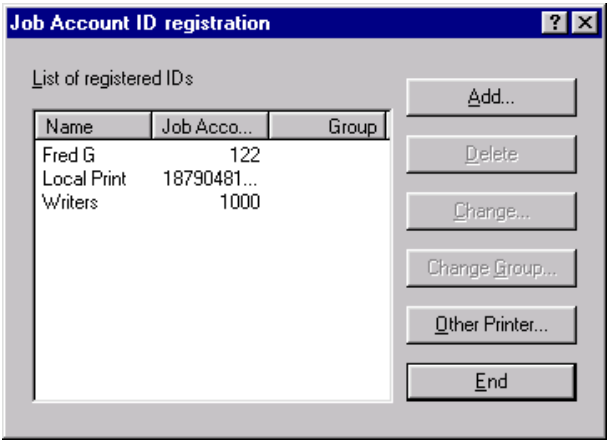


4. Make any desired changes. Click **OK**.
5. Click **End**. Click **OK**.

Deleting Account IDs

From the main Print Job Accounting window:

1. Open the printer tree and double click the name of the printer/ group for which an Account ID is to be deleted.
2. On the User tab, click **Register**.
   The following window appears:



3. Click the Name for the Account ID to be deleted. Click **Delete**.
4. Click **Yes** to confirm the deletion.
5. Click **End**. Click **OK**.

NOTE

The Server computer must be running continuously, or at least be running at the scheduled time(s) each day, for the software to acquire the print job information.

Setting Up/Changing the Log Acquisition Interval

The log acquisition interval is normally set up when you register a printer (see “Registering Printers” on page 648).

To change the log acquisition interval for a particular registered printer or group:

1. From the main Job Accounting window, click Printer to open the printer tree, then click the printer for which you wish to change the acquisition interval.
2. Click **Printer** → **Properties**.
3. On the Options tab, make any desired changes under Acquire Logs, then click **OK**.

Manually Setting Up Items Reported in the Log

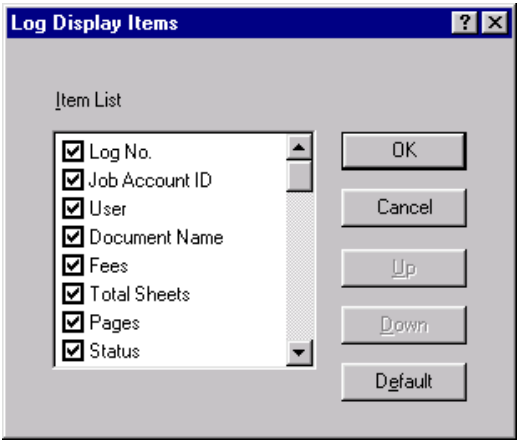
To set up the items to be displayed in, or exported from, a log:

1. From the main Job Accounting window, click the printer/group for which you wish to set up the log display.
2. Click **Log** → **Display/Export Item Settings**.
3. Click one of the following selections to set the items to be displayed and the sequence in which they will be displayed:

Log Display Items

Standard acquisition Log.

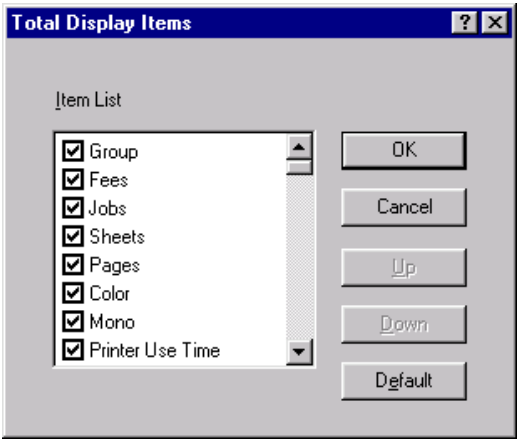
The following window appears:



Total Display Items

Listing of totals for a registered printer.

The following window appears:



Log Export Items

Items to be included in an exported log file.

The following window appears:

Total Export Items

Items to be included in an exported file containing a listing of totals for a registered printer.

The following window appears:

4. Make your selections:
   a. Items to be included have a check mark in their box. To delete or add an item, click the box next to it to toggle the check mark on and off.
   b. To change the position of the item in the log, click the name, then click Up or Down.
5. Click **OK**.

Using the Reports Tool

The Job Accounting software can be used with Microsoft Excel to generate log reports using one of nine pre-programmed macros.

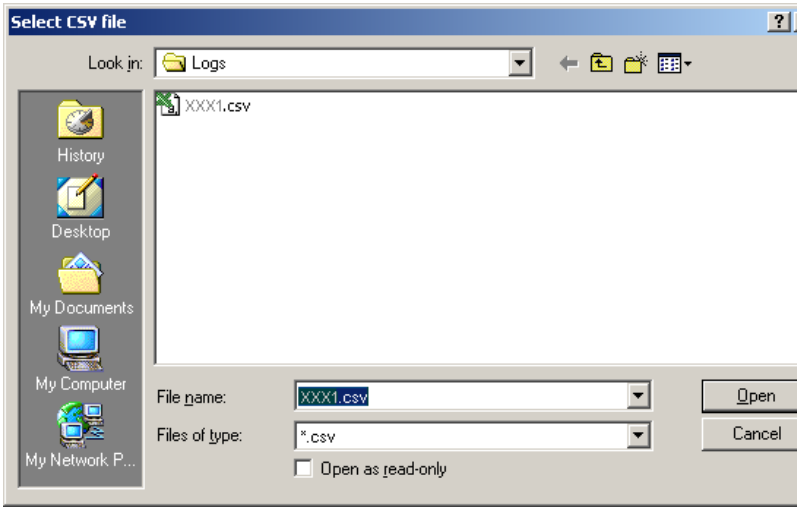
Installing the Reports Tool

1. Place the driver CD supplied with your printer in the CD-ROM drive on the Server computer and wait for the Menu Installer to open.
   If the CD does not AutoPlay, click Start Æ Run Æ Browse. Browse to your CD-ROM drive. Double-click Install.exe. Click OK.
2. Click **Next** to accept the terms in the license agreement.
3. Select the language.
4. Click **Network Software** → **Administration Tools** → **Job Accounting** → **Reports Tool**. Follow the on-screen instructions.

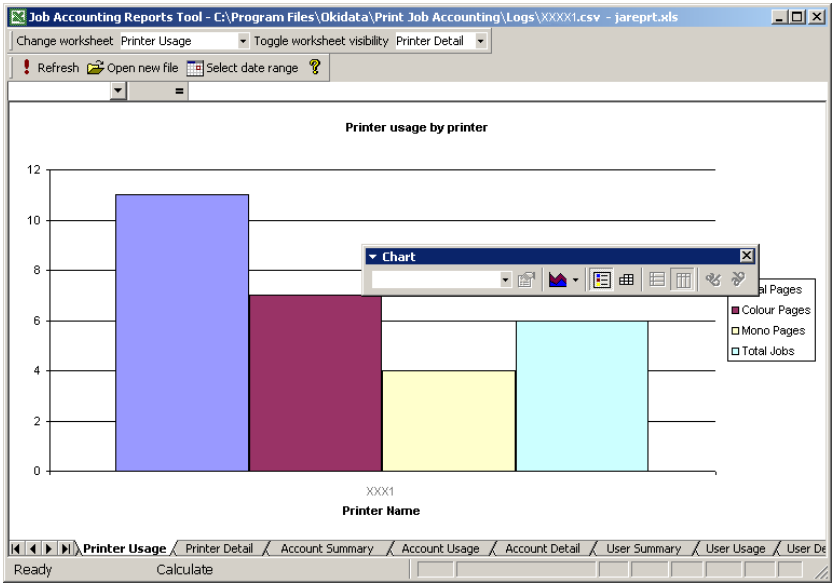
Using the Reports Tool

Generating a Log Report Using Excel

1. Make sure the Print Job Accounting server software is open and that a log has been acquired.
2. From the Start menu, click **Okidata** → **Print Control** → **Open Print Control Reports**.
3. Click **Enable Macros**.
   Excel opens. The following window appears over it:



4. Browse to the log file you wish to open. Click **Open**.
   The file opens in Raw Data mode.
5. Select the worksheet you wish to view from the Change worksheet drop-down list (e.g., Printer Usage).
   The window changes to display the selected worksheet.:



6. To print the data, press Ctrl-P.
7. When done, click ☒ to close Excel

Available Excel Macros

Account Detail	Detailed information of each job for every Account ID, including: • Account ID • Job ID • Date • Document Name • Paper Size • Media Type • Total Sheets • Color Pages • Mono Pages • Total Costs **Note:** To limit the columns displayed, click Fields. To limit the rows displayed, either limit the date range or click Accounts.
Account Usage	A chart of the data in the Account Summary worksheet.
Account Summary	Summary of information for each account.
Printer Detail	Detailed information for each job sent to each printer, including: • Printer Name • Job ID • Date • Account ID • User ID • Duplex Pages • Total Sheets • Color Pages • Mono Pages • Total Costs **Note:** To limit the columns displayed, click Fields. To limit the rows displayed, either limit the date range or click Accounts.
Printer Usage	A chart of data in the Printer Summary worksheet.

Available Excel Macros

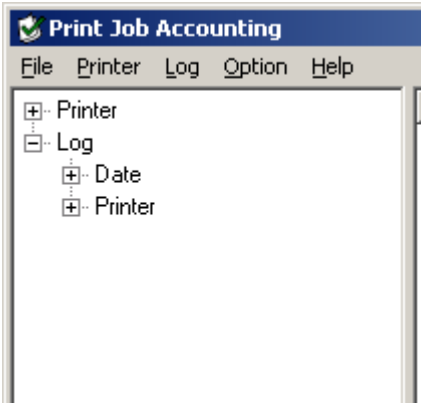
Printer Summary	The following information for each printer for which data is available: • Printer Name • Total Jobs • Total Sheets • Number of Color Pages Printed • Number of Duplex Pages Printed (appears only when optional duplex unit is installed) • Total Costs Incurred (as calculated by the Print Job Accounting software)
User Detail	Detailed information for each job sent to the printer, broken down by User ID, including: • User ID • Job ID • Date • Document Name • Paper Size • Media Type • Total Sheets • Color Pages • Mono Pages • Job Cost

Available Excel Macros

User Usage	Chart of data in the User Summary worksheet.
User Summary	Includes the following for each User ID: • Total Jogs • Total Sheets • Color Pages • Mono Pages • Duplex Pages • Total Costs

Viewing Acquired Logs

From the main Job Accounting window, click the **[+]** beside Log to expand the Log Tree.



8. Click the [+] beside the submenus to drill down to the log you wish to view.

- **Date** Submenu

  Lists the logs by date (year/month), then by registered printer.

- **Printer** Submenu

  Lists the logs by registered printer, then date.

9. To view a log:

- Double-click an entry

  or

- Click an entry, then click **Log** → **Display Log**.

Reading Log Entries

The items displayed in Print Log are as follows:

Log Entries [in alphabetical order]

1200dpi[a]	Number of sheets printed in 1200 dpi
1200x600dpi[a]	Number of sheets printed in 1200 x 600 dpi
600dpi[a]	Number of sides printed in 600 dpi
Account ID	User Account ID
Color	Number of sides printed in color
Document Name	Document Name
Duplex Print	Simplex or Duplex
Envelope Feeder[a]	Number of sheets fed from Envelope Feeder
Log No.	The ID of the job.
Media[a]	Paper type used - Transparency etc.
Mono	Number of sides printed in Monochrome
Multi-Purpose Tray[a]	Number of sheets fed from Multi-Purpose Tray
Off-line time during printing[a]	Offline time during printing (if any)
Off-line time during processing[a]	Offline time during processing (if any)
Pages	Number of printed sides

Log Entries [in alphabetical order] (continued)

Paper Size	Paper size used
Paper Type[a]	Paper type used - Light, Medium etc.
Sheets	Number of sheets of paper
Staple	Number of staples used
Status	Result - Printed, Rejected etc.
Time printing began[a]	Time the printing process started
Time printing ended[a]	Time the printing process ended
Time the log acquisition started[a]	Time the log was acquired from the printer (started)
Time the log was acquired[a]	Time the log was acquired from the printer (completed)
Time the process began[a]	Time the job processing started
Time the process ended[a]	Time the job processing ended
Total Sheets	Number of sheets of paper
Tray1[a]	Number of sheets fed from Tray1
Tray2[a]	Number of sheets fed from Tray2
Tray3[a]	Number of sheets fed from Tray3
Tray4[a]	Number of sheets fed from Tray4
Tray5[a]	Number of sheets fed from Tray5
User	User Name

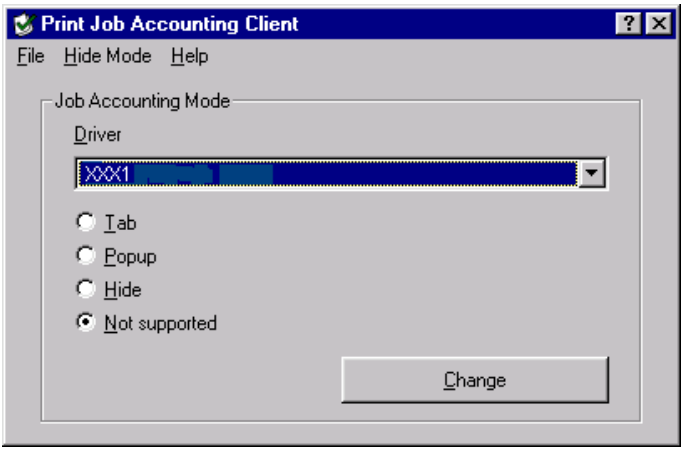
a. This item is not displayed by default. To display it, see “Manually Setting Up Items Reported in the Log” on page 684.

Client Software

Starting the Client Software

On the client computer, click **Start** → **Programs** → **Okidata** → **Print Job Accounting Client** → **Change Job Accounting Mode**.

Setting the User Name and Account ID



There are four Job Account Modes:

- Tab Mode
- Popup Mode
- Hide Mode
- [Not supported] Mode

Decide which mode you wish to use.

Client Software

Job Account Modes

Tab Mode

In this mode, the tab for setting the User Name and Job Account ID will be displayed under Job Account Printer Driver Property. This mode should be selected when the computer is used by one person.

Popup Mode

In this mode, the dialog box for entering the User Name and Job Account ID will be displayed every time printing is run. A printer client enters their assigned User Name and Account ID to print. This mode is useful if several people share the same computer.

Hide Mode

In this mode, the System Administrator creates an ID file that describes the information on all clients. Next, each client clicks Import ID File on their computer, then specifies this file.

Printer clients need not know anything about their own Account ID.

This ID file describes the information on each and every client in one line, using the following format.

Login User Name, Account ID {User Name}

Login User Name	User name entered when logging onto Windows.
Account ID	Account ID corresponding to the user name.
{User Name}	User name displayed in this System. This is optional. If this is unspecified, the Login User Name will be used as the User Name.

Use the extension ".csv" to save the file.

Client Software

Job Account Modes

[Not supported] Mode

In this mode, all jobs to be printed will be recognized as Unregistered ID(0).

NOTE

For print jobs recognized as Unregistered ID, you can set it so they are permitted or refused for printing, but document names will not be displayed on the print logs.

Checking the Status of Printers on the Network

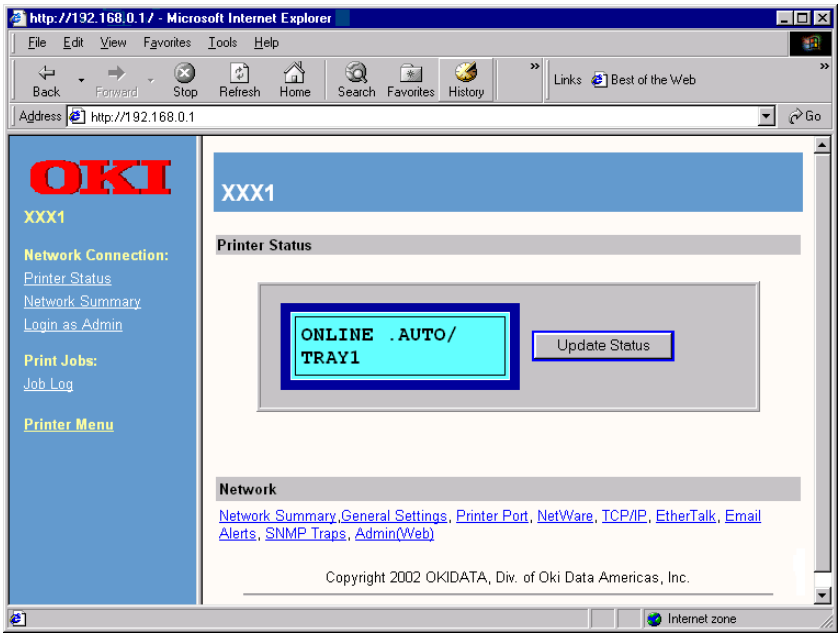
1. Open Microsoft Internet Explorer.
2. Type in the IP address for the printer (e.g., http://192.168.0.1).

NOTE

To find the IP address for the printer, do any of the following:

- **Open the Print Job Accounting software and select the printer in the Printer Tree, then click Printer → Properties.**
- **Use the printer's front panel display to navigate to the network menu (see your printer's User's Guide for details).**
- **Print a list of menu settings (see your printer's User's Guide for details).**

3. Press Enter.
The following Printer Status window appears:



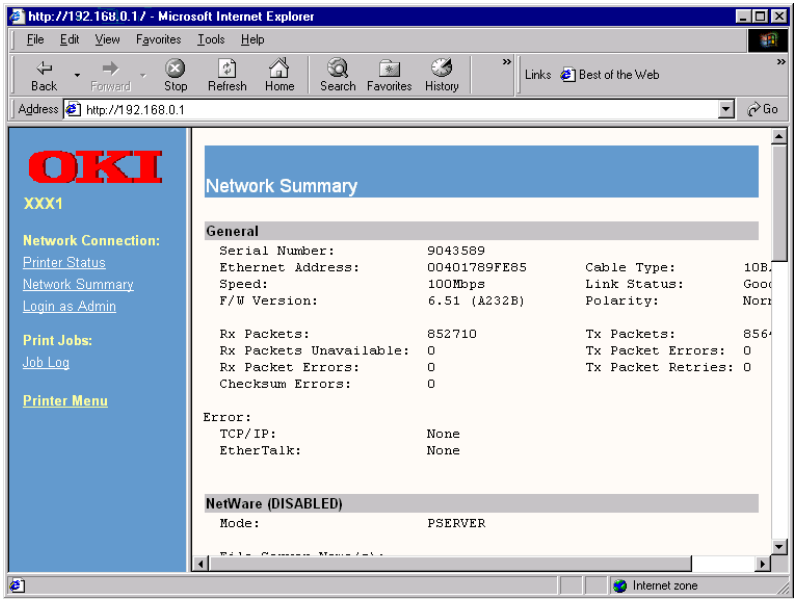
Printer Status

The default opening screen. To see real-time printer status, click the **Update Status** button.

Network Summary

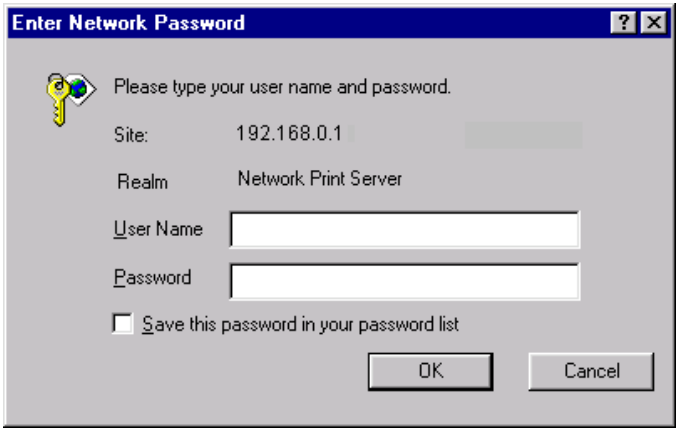
Clicking this will bring up a window with detailed information about the network, including

- General Settings
- NetWare
- TCP/IP
- JetAdmin
- LAN Server/DLC
- EtherTalk
- Port Configuration



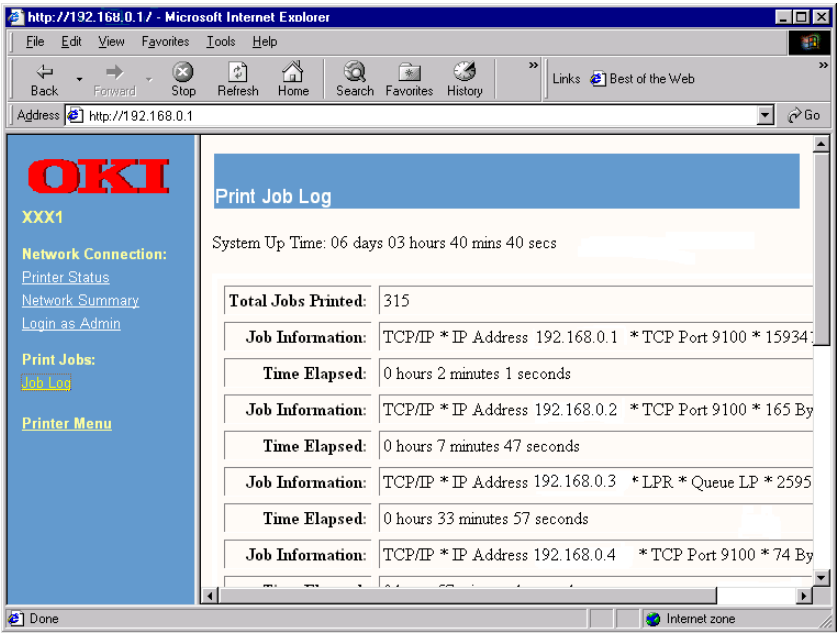
Login as Admin

This brings up the “Enter Network Password” window. You must log in before accessing the Printer Menu:



Job Log

This displays the Print Job Log for the selected printer:

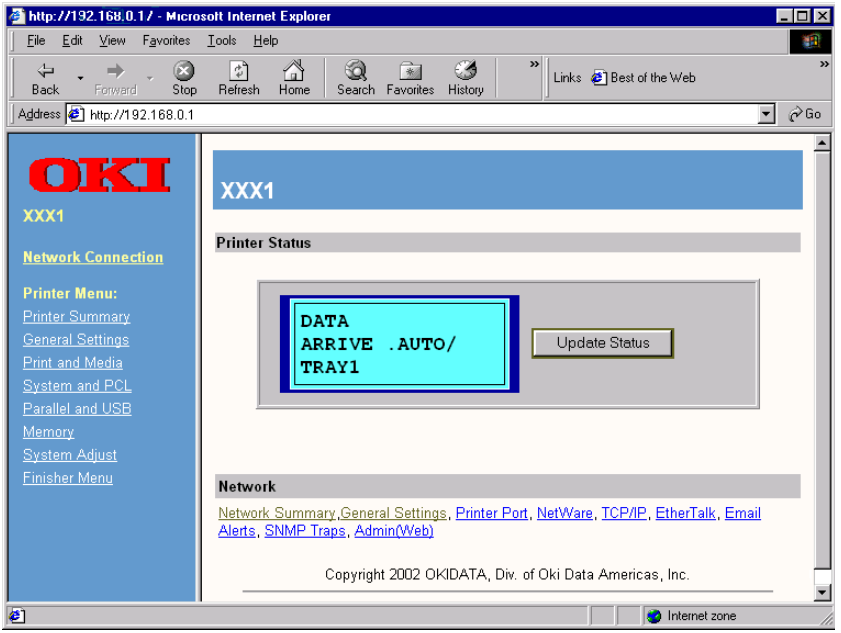


Printer Menu

Once you are logged in as the Administrator, clicking this will bring up the following window, through which you can make changes in the printer's menu settings.

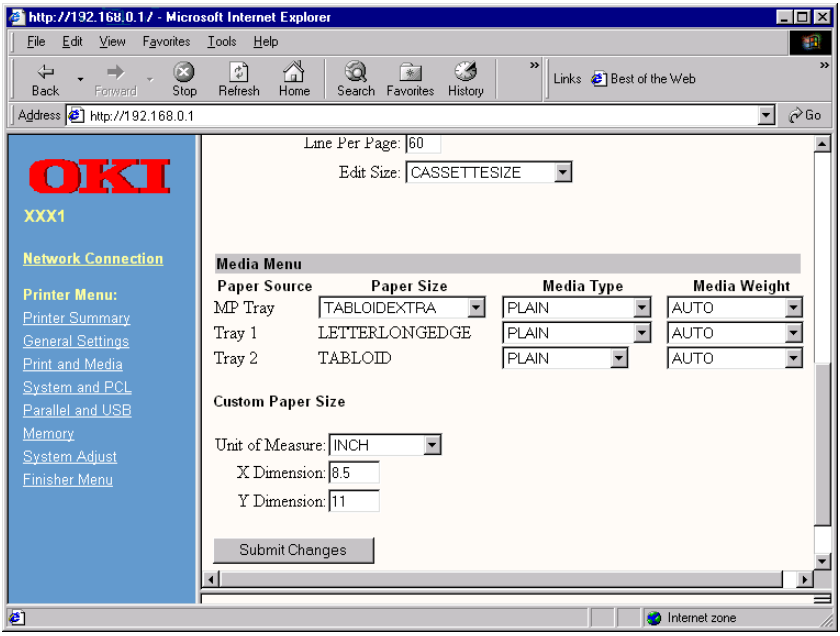
The left pane contains a list of menu setting groups from which to select:

- Printer Summary
- General Settings
- Print and Media
- System and PCL
- Parallel and USB
- Memory
- System Adjust
- Finisher Menu (appears only if optional Finisher is installed)



The System Administrator can make changes in the menu settings directly through the web page. For example:

1. Click **Print and Media**.
2. Make any changes desired.
3. Scroll down to the bottom of the screen and click **Submit Changes**:



Troubleshooting

Q. The printer I selected is not shown in the list when I click Printer → Add a printer → Next.

A. If it is offline, the printer will not be shown. Check to see that the printer is online.

There are times the printer is not shown during printing. Wait for a while and try again. If it is still not shown, specify that printer's IP address in the **Specify the printer for which logs will be acquired** window before clicking **Next**.

Q. The content of Log Pane (right side of window) is not updated.

A. Click **Log** → **Refresh Display**.

Q. The following message was displayed: "Cannot connect to the printer. Wait for a while and try again."

A. Check that the printer is not offline. This message is sometimes displayed during printing. Try again later.

Q. The following message displays when I select Printer → Delete a Printer: "Cannot delete while log is being acquired."

A. With the printer selected in the Printer Tree, click **Printer** → **Start/End Log** to cancel the process by which print logs are acquired from the printer. Then click **Printer** → **Delete a Printer/Printer Group**.

Q. The following message displays when I select Printer → Acquire a Log: "This processing cannot do between acquisition of a Log."

A. A print log is already being acquired from the printer at this time.

Known Problems / Solutions

1. When using Duplex printing with the PostScript driver, if the reverse side is blank it is not counted as a page.
2. Installer installs a file for the currency unit according to the system's standard Regional Setting. If the correct file is not installed, please check the Regional Setting. If you wish to set to the system standard, check "Set as system default local" under "Regional Setting."
3. Printing with Network Menu's "PRINT SETTING" is handled as an unregistered client job, and will not be recognized as a local print job.
4. PostScript printer drivers (Macintosh) do not store document names in the log.
5. In applications that create their own PostScript codes when using the Windows PS driver, the Job Accounting command (Job Account ID, user name) will not be output. Examples of such applications include Adobe PageMaker and CorelDraw (when the "Use PPD" check box is checked in the Print dialog box.)
6. If you print from Win2000 (Client) to Win2000 (Shared Printer Job account Mode already set), you have to remove the check from the "Enable advanced printing features" under the "Advanced" tab in the shared printer's Properties. Removing the check, however, will disable both the Booklet (PCL) and Page Order (PS) features.

Uninstalling Print Job Accounting

Uninstall the Server Software

1. Select a printer in the left pane of the Server Software.
2. Select **Start/end log** from the Printer menu.

Important!

At this stage the Server Software stops acquiring print logs from the printer at the set interval time. However, the printer will continue logging until it is deleted. Be sure to perform step 3 "Delete a printer" without fail before uninstalling the Server Software.

3. Select **Delete a printer** from the Printer menu.
   You are prompted as to whether or not you wish to delete the print log for the jobs that have been run by the printer you are deleting.

CAUTION!

Even if you select "No" at this point, unless you register the printer again, the print log for those jobs cannot be referenced.

If you need the log even after deletion of the printer, be sure to select Export Logs from the Log menu, then save them in a file before deleting the printer.

4. Click **Start** → **Programs** → **Okidata** → **OKI Print Job Accounting** → **Delete OKI Print Job Accounting**.

Uninstalling Print Job Accounting

Uninstall the Client Software

On each Client computer, click **Start** → **Programs** → **Okidata** → **OKI Print Job Accounting Client** → **Delete OKI Print Job Accounting client**.

PrintSuperVision

General Information

PrintSuperVision is a web-based application for managing printing devices connected to a network. PrintSuperVision provides access to networked printer data for monitoring, reporting and managing networked printers. It provides a full range of management functions for Oki printers, and for other brands of printers as well.

Load this program from the Menu Installer located on CD1.

Features

- Provides real-time status of all your printers to monitor and report printer usage, manage consumables usage and replenishment.
- Administrator interface to the system is via a standard web browser enabling you to check on printer status and compatible multi-function devices from anywhere on the web.
- Performs initial discovery and configuration of printing devices connected to network.
- View groups of printers by list, floorplan or maps.
- Monitors devices over time, including maintenance data, and saves data for statistical reports.
- Sends mail alerts of events affecting device functionality.
- Generates reports on-screen or in XHTML, Excel and XML formats, plus Text and CSV formats.
- Integrates with Oki Data's on-line web support.

Using

Types of Users

Guest Users

A user, without username, can get basic information about devices, such as type, status and location of printing devices.

Standard Users

in addition to guest user information, standard users can get information about printing resources, configure e-mail alerts, and get basic statistics reports.

Administrators

Can manage devices, maps, alerts, user accounts, maintenance data, and create comprehensive statistics reports.

Typical Usage Scenarios

- The network administrator in a large organization can get customized daily reports of the status of all printers (including usage reports).
- User accounts can be configured so that a person in each department can manage their local printers.
- The system can be set to alert the local user and the administrator of problems.
- The administrator can log into the PrintSuperVision system from any client machine and manage printers on different sites, looking at a map view to see instantly the status of all the printers.

  PrintSuperVision
  - allows the administrator to track the cost of the printers.
  - tracks maintenance.
  - advises when to replace consumables, based on current printer usage (Oki color printers).

System Requirements

Server Software

Pentium 75, 64MB or better with CD support running:

- Windows 98 with Microsoft Personal Web Server Version™, available for free download from Microsoft™ as Option Pack 4.0.
- Windows NT4 Workstation, SP6.0a, Microsoft Personal Web Server Version, available for free download from Microsoft as Option Pack 4.0
- Windows 2000 or NT4 Server SP6.0a, Microsoft IIS™, available for free download from Microsoft as Option Pack 4.0

Client Software

- Microsoft Internet Explorer 4.01 or above
- Netscape Navigator 4.0 or above
- Recommended minimum screen resolution of 1024 x 768 pixels

Additional Information

For more information, click on **Help** in the PrintSuperVision program.

Network Printer Status Utility

General Information

This utility creates an additional tab (STATUS) in the PostScript and PCL drivers that allows the client to monitor the selected printer's status.

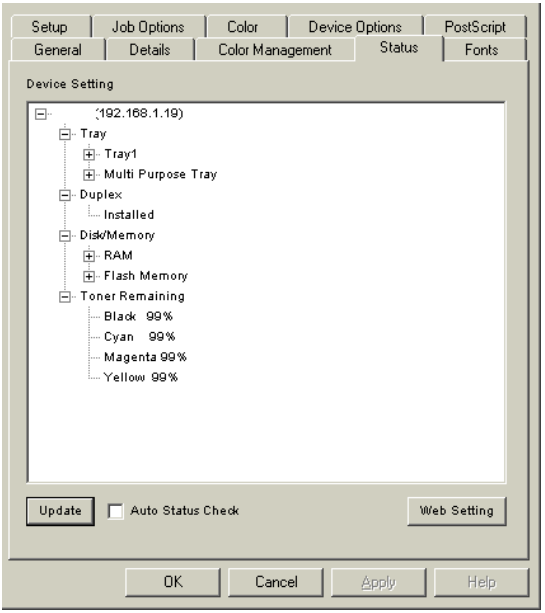
Load this program from the Menu Installer located on CD1.

Installation

1. Insert the Drivers, Color, and Network Utilities disk into the CD-ROM drive.
   If CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.
2. Click **Network Software** → **Administration Tools** → **Network Printer Status**. Follow the on-screen instructions.

Using

1. Click **Start** → **Settings** → **Printers**. Right-click the Oki Printer icon. Click **Properties**.
2. Click on the **STATUS** tab.
3. Click the **UPDATE** button to see device settings. The following screen displays:



Click on an item to see this information:

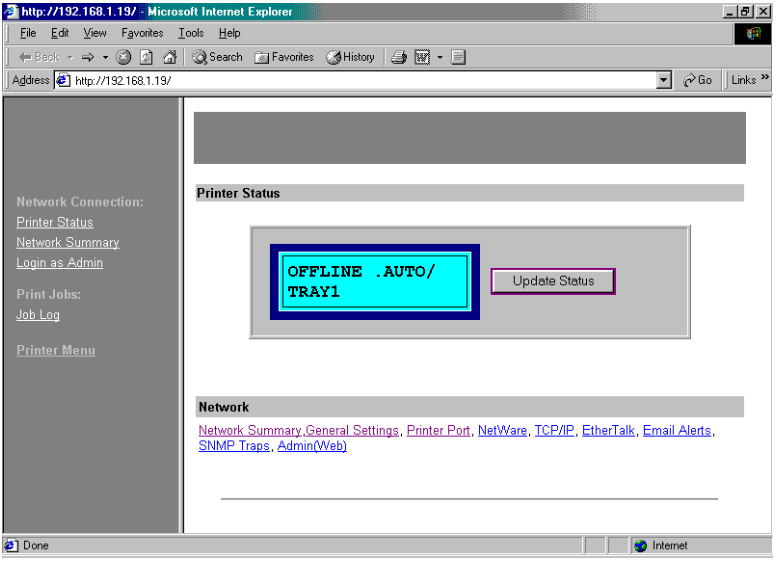
Trays:	Paper Type, weight
Duplex:	Installed/not installed
Disk/Memory:	RAM size and % used; Flash Memory size and % used
Toner Remaining:	% toner remaining is all cartridges

NOTE

If the Automatic Status Check box is checked, this utility "pings" the printer every time you open the Printer Properties dialog in the printer driver.
This *severely* slows opening Printer Properties.

Checking the Printer Status

Click the WEB SETTING button. The following screen displays:



Click on the items listed on the left to see:

- Network Summary
- Login for Administrators
- Job Login
- Printer Menu

To see real-time printer status, click the **UPDATE STATUS** button.

Oki LPR Utility

General Information

Oki LPR Utility allows you to print directly to a printer on the network without a print server. It creates an Oki Printer Port, and installs a pop-up status box so you can monitor printer status.

Oki LPR operates in Windows Me/98/95, Windows NT 4.0, Windows 2000, and Windows XP operating systems.

Load this program from the Menu Installer located on CD1.

How to Install

The Oki LPR Utility supports TCP/IP. Your network administrator must set up an IP address and TCP/IP properties for your printer.

1. To install the utility, insert the Oki CD1 into the CD-ROM drive. If CD does not AutoPlay, click Start →Run →Browse. Browse to your CD-ROM driver and double-click Install.exe, then click OK.
2. Click **Network Software →Installation/Config →LPR Utility**. Follow the on-screen instructions.

Oki LPR Status Box

The Oki LPR Utility Status Box displays the following information:

- **Printers**: Names of added printers (You can add up to 30 printers)
- **Status**: LPR Utility status (empty, connecting, sending, paused, checking status, not connected)
- **Finish**: Number of completed jobs.
- **Queue**: Number of jobs waiting to be printed.

Additional Information

For help using the Oki LPR Utility, click on **HELP** in the program.